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ABSTRACT

This monograph contains the proceedings of a conference that provided a forum for those who design, develop, conduct, evaluate, or administer competency-based educational programs for adults regardless of the program setting. Introductory materials include an overview of the conference, an introduction, and a foreward that summarizes the previous six national conferences. Two addresses are presented. In the first, "Forming Linkages in the Learning Society," K. Patricia Cross notes that the changing role of education, the changing nature of the student clientele, and the resultant need for changes in practice speak strongly for the use of competency-based approaches. In the second presentation, John Lawson, Massachusetts Commissioner of Education, looks at the need for adult education and the response of the Massachusetts Board of Education to the need. Synopses of 31 workshops are then provided. Topics covered include program evaluation, education for rural adults, adult reading competence, adult reading management systems, developing and assessing vocational competence, higher education for the incarcerated, linking academic basic skills to jobs, adult education linkages, adult diploma programs, and limited English proficiency adults. Appendixes list sponsors, committee members, exhibitors, and participants. (YLB)

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PROCEEDINGS OF THE SIXTH ANNUAL NATIONAL
COMPETENCY-BASED ADULT EDUCATION
INVITATIONAL CONFERENCE

CBAE: LINKING EDUCATION, HUMAN SERVICES, BUSINESS AND INDUSTRY

The Boston
Park Plaza Hotel
Boston, Massachusetts
January 27, 28, 29, 1982

Sponsored by
Bureau of Student, Community and Adult Services
Massachusetts Department of Education
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ABOUT THE CONFERENCE

Ruth S. Nickse Ph.D.
Massachusetts State Department of Education

This monograph contains proceedings of the Sixth Annual National Competency-Based Adult Education Invitational Conference which was held in Boston, Massachusetts in January 1982. The event was sponsored by the Bureau of Student, Community, and Adult Services of the Massachusetts State Department of Education and Worcester State College.

Historically, CBAE Conferences originated in the field of adult education but the focus of this particular conference was more broadly conceived, as evidenced by its title "CBAE: Linking Education, Human Services, and Business and Industry." The goal of this conference was to provide a forum for those who design, develop, conduct, evaluate or administer programs for adults, regardless of the context, and in so doing, use competency-based approaches. The conference theme is thus a recognization of the power of an educational concept to bridge concerns of those responsible for adult education who are from diverse but interrelated fields.

The four hundred or so individuals who attended the conference came from all over the United States and from Canada. They are employed as instructors, teachers, administrators, training directors, program planners and policy makers, from both the public and private sectors. A serious group of participants, they were intent on sharing the problems, challenges and excitement of competency-based policies, products and practices.

Though there were many highlights; outstanding workshops and excellent publishers' exhibits - the event which best synthesized the conference was the keynote address given by K. Patricia Cross, titled "Forming Linkages in the Learning Society." Noting the changing role of education, the changing nature of the student clientele and the resultant need for changes in practice, Dr. Cross spoke strongly in support of competency-based approaches. Her words and the message they conveyed will inspire us long after the conference itself has ended. The essence of her remarks, which are printed in their entirety, are summarized in the following quote.

> "Competency-Based education is a solution to many of the problems that plague us as we move from traditional school - based education for a few years of life to the Learning Society, in which learning is cumulative lifelong, and pervasive throughout society...

It speaks to the programatic interests of adults in performing their daily tasks with competence...It is transportable, meeting the needs of a mobile society, but more importantly, capitalizing on the versatility of the multiple providers of education...It is more patable than competitive education for most adults, but especially for those whom we most need to serve--undereducated adults trying to make a living in a society in which the capacity and motivation for life-long learning have become survival skills."

INTRODUCTION

Just what is "competency-based education" anyway? Although no one definition might satisfy its many supporters, it is a term used to describe an array of programs and activities that have at least two characteristics in common: the programs serve adults and they use a coordinated approach for the teaching and testing of a variety of academic, generic, vocational and functional skills. In its ideal form, components of a competency-based program include prescribed outcomes and clear standards for performance, pre-and post-instruction assessment, timely and specific feedback, and an adult-oriented content. Structurally, programs are organized to offer multiple opportunities for instruction and testing, flexible processes, and a focus on the needs and characteristics of adult learners.

The advantages of such a management system, whether at the classroom, program, or institutional level, include flexibility of service, individualization, content relevance and an emphasis on the application of skills in context. Further, accountability is viewed as a mutual concern, with responsibility for it shared by both program staffs and the learners they serve.

Competency-based educational activities are diverse, serving many populations for different purposes through different organizational structures, as is evidenced by the events scheduled for this conference. Represented here are exemplary programs in adult basic and secondary education, vocational education for youth and adults, two and four-year liberal arts college programs, corrections, military, and human service education, and training programs in both the public and private sectors. Activities and issues in instruction, assessment, evaluation, administration, materials, staff development, research, credentialing, and the policies and politics of competency-based education are to be carefully examined and analyzed.

We hope that the conference serves as a forum to expand awareness of common concerns in adult education and training, and that it promotes linkages between programs, so important and necessary in these critical times. Thank you for sharing your ideas, concerns, and expertise with us.

Ruth S. Nickse
Program Chairman

FOREWORD

Welcome to the National Conference on Competency-Based Adult Education. This is the sixth in a series of CBAE conferences which began in 1977.

The first was held in San Francisco, sponsored by the California Department of Education. The theme that year was "New Directions in Adult Competency Education," and the conference brought together an array of experts in CBE who, until then, had operated in an essentially independent manner. This event surfaced major CBAE activities, and set the stage for further such endeavors.

In 1978, the national conference was hosted by the University of Texas and the State Department of Education in Austin. At this conference, a CBAE cadre began to take shape.

The third conference returned to California, this time to San Diego. The theme was "The Future of Adult Competency Education: Making It Work!" The title indicates this conference was oriented towards practitioners; it also fostered a broadening of the foundations of support for CBAE.

The 1980 conference came East, to Orlando. Sponsored by a variety of public and private organizations, the theme was "The Challenge of CBAE." This event drew over 350 participants - the large majority from programs outside the Southeast. Thousands of additional adult educators were to have access to the conference via the publication of conference proceedings in a NAPCAE Exchange Magazine special edition.

New Orleans was the site of the fifth conference, again sponsored by a variety of educational organizations. "CB-5" further broadened the theme of CBAE by focusing attention on competency assessment, educational technology, and administration. Conference participants also represented a wider variety of adult serving interests.

This sixth Boston conference represents the first time that this event has been held in the Northeast. The theme "CBAE: Linking Education, Human Services, Business and Industry" acknowledges that CB techniques are useful to all persons who design, develop, conduct, evaluate or administer programs for adults. The program contains examples of competency-based programs in their great breadth and variety, representative of outstanding efforts being made across the country to improve the education and training of adults.

Looking ahead, the seventh national conference is to be sponsored by the Adult Competency Education Committee of the new national organization, the American Association of Adult and Continuing Education. A two-day adult competency conference will be held just prior to the AAACE National Conference in San Antonio, Texas in November, 1982.
For further information, contact Elaine Shelton, Education Annex S-21, University of Texas, Austin, Texas 78712, or telephone 512-471-4623.

James Parker
U.S. Department of Education

TABLE OF CONTENTS

ABOUT THE CONFERENCE

Ruth S. Nickse Ph.D. Massachusetts
State Department of Education..... I

INTRODUCTION

Ruth S. Nickse Ph.D.
Program Chairman III

FOREWORD

James Parker
U.S. Department of Education..... IV

GENERAL SESSION I

Forming Linkages in the Learning Society,
by K. Patricia Cross..... 1

GENERAL SESSION III

John H. Lawson, Commissioner of Education
Massachusetts..... 16

SYNOPSES OF WORKSHOPS

..... 21

APPENDICES

(See next page for complete list)..... 65

APPENDICES

Appendix A..... 65
Co-sponsors and Co-hosts

Appendix B..... 67
Acknowledgements

Appendix C..... 69
Conference Committee

Appendix D..... 71
Boards

Appendix E..... 73
List of Exhibitors

Appendix F..... 77
Names and Addresses of Workshop Presenters

GENERAL SESSION I

FORMING LINKAGES IN THE LEARNING SOCIETY

K. Patricia Cross

Harvard Graduate School of Education
Cambridge, MA.

"Linking Education, Human Services, Business and Industry." That is an ambitious theme for your conference, and it's even more ambitious as a program for action. But the call for cooperation among the multiple providers of adult education reflects the fact that we are rapidly approaching the time when most of society's people and most of society's organizations will be involved, in one way or another, in teaching and learning. It behooves all of us to think carefully about the new roles that we will be playing in the Learning Society.

There is a good chance that the new enthusiasm for lifelong learning will have an impact on education that extends far beyond the mere numbers that many traditional college educators are hoping for. Indeed, in the vigorous pursuit of adult learners to fill the seats left vacant by diminishing numbers of eighteen year-olds, college educators are discovering that they have no monopoly on education for adults and worse yet that some of the sacred traditions of higher education are unacceptable to adult learners.

Your interest in competency-based education questions one of higher education's more dubious traditions--the practice of evaluating learning by grading on the normal curve. That particular practice seems to be an anomaly of the traditional school system, and it is significant that educators in other settings have been more concerned with pushing the normal curve out of shape than with preserving it. Where student performance is the goal, it makes sense to aim for a badly skewed curve in which the largest number of students are achieving, not some statistical average score, but maximum competency from their learning.

Adults bring a new dimension to traditional education, and change within higher education as well as between higher education and the rest of the world is inevitable. Those of you working with competency-based adult education are on the cutting edge of a revolution of sorts. You combine a common interest in finding new ways to evaluate learning with the diversity of multiple providers of adult education. Your strength as a group lies in the fact that, from different perspectives, you can work toward common ends.

That suits my ends just fine because my message this afternoon has three themes: 1) the changing role of education in the society, 2) the changing nature of the student clientele, and 3) the changing practice of education. I don't promise to keep those themes separate and distinct because they are all indicators of our entrance into the Learning Society.

The need for education on the part of both individuals and society is escalating as fast as the world changes--and that is at a heady pace these days. Margaret Mead once remarked that the world in which we were born is not the world in which we live nor is that the world in which we will die. I was born into a world without television, mass air travel, credit cards, frozen foods, or computers. My parents were born into a world without automobiles, radios, or refrigerators. That is a lot of change in a short span of time, but change has a way of escalating so that each new generation is coping with a faster rate of change than the preceeding generation.

The transportation industry serves as a good example. For thousands of years, people transported themselves and their worldly goods by walking from place to place. With the taming of the horse, the distance travelled and the loads transported became a different order of magnitude. With the invention of trains and cars, another quantum leap occured.

Then airplanes increased the speed of travel, not just from twenty to eighty miles per hour, as improvements in the car had done, but from eighty to eight hundred miles per hour. Now Voyager II is moving through space not just ten times faster than airplanes but at the rate of 54,000 miles per hour.

Once the quantum leap occurs, a whole new industry is on the scene. No amount of careful breeding, attention to diet, or training, can make the greatest horse even approach in efficiency the "transportation work" done by the most mediocre car. Thus anyone in the transportation business must learn an entirely new set of skills and knowledge whenever a leap in technology wipes out one industry and creates another, often within the timespan of a single generation.

Quantum leaps in knowledge occur with considerable regularity across a wide variety of fields. Change is now so rapid in medicine, for example, that obsolescence is measured by the "half-life." The half-life of knowledge in medicine is about five years, meaning that within five years of receiving the medical degree, half of all a doctor's information and training is obsolete. Continuous lifelong learning is so essential now for almost any professional serving the public that states and licensing boards have resorted to legislating or mandating continuing education for certain occupations. Competency, of course, is the goal. But there is many a gap between attending a class, learning the knowledge or skill, applying the learning, and using it in daily practice. Research has not yet answered the question of whether mandated continuing education leads to improved practice, but logic suggests that a competency-based perspective is more likely to accomplish the desired ends than are more traditional measures such as mere attendance or the ability to score well on a written examination that may or may not be related to competent performance.

Another sign of the times in the Learning Society is seen in changing lifestyles. It looks as though American society is moving away from the "linear lifeplan" in which education is for the young, work for the middle-aged, and enforced leisure for the elderly, toward a "blended lifeplan" in which education, work, and leisure go on concurrently throughout life. All age groups are opting for a better balance in life's activities. The elderly, resentful of spending full time in enforced leisure have insisted upon the right to work if they want to, and Congress has recognized that right through a rollback of mandatory retirement. Elderhostel, the phenomenally successful educational program for those 60 and older attests to a growing interest on the part of older people in devoting some leisure time to education. The middle-aged, no longer content to spend all their waking hours on the job, are seeking greater fulfillment through education and recreation. Some, especially women, are greatly interested in job-sharing. As a result, part-time workers are increasing in industry as fast as part-time students are increasing in colleges.

If the predictions of the National Center for Education Statistics are correct, by 1985 half of all students studying for college credit will be part-time students. That represents a huge increase in a very short period of time. As recently as 1970, fewer than a third of all college students were studying part-time.

The new part-time student body is made up of young, formerly full-time students, middle-aged formerly full-time workers, and elderly formerly full-time retirees. The Learning Society encourages a blended lifeplan through recognizing the value of education through every phase of life.

At the same time that there is a blending of activities in the lives of individuals, there is a blending of functions among the organizations of society. Schools no longer have any monopoly on education, nor does business tend strictly to business.

Employers are increasingly concerned about developing human resources through on-the-job training for employees, workshops for professionals, and think tanks for executives. Professional associations are moving beyond their traditional functions of publishing journals and holding annual meetings to developing courses, conducting workshops, distributing audio and video cassettes, and in general, contributing to the life-long professional education of their members. Smaller scale activities also illustrate the blurring of functions among the organizations of society. Travel agencies are adding educational components to packaged tours at the same time that alumni offices and extension services are adding packaged tours to credit-bearing courses. Increasingly, the Learning Society consists of a rich mixture of community learning resources, and no provider has any monopoly on the learning market.

Industry spends not mere millions but billions of dollars annually on the education and training of employees--more than the total appropriations for higher education in all fifty states. Last year, AT&T spent 4½ times as much on the education of its employees as MIT spent on the education of its students (Luxenberg, 1978-79). The modern IBM campus north of New York City and the George Meany Center for Labor Studies outside of Washington D.C. have classrooms and residence halls that surpass anything offered in our most exclusive and expensive colleges. Professional associations are the builders of vast educational networks. The American Management Association, with an annual education budget of 50 million dollars, uses 7,500 lecturers and discussion leaders to conduct 2,000 formal education programs each year. The American Institute of Certified Public Accountants offers extensive professional education programs, consisting of individual study and regional workshops that rival the degree-granting monopoly of higher education because licensing boards that determine who is

licensed to practice accounting recognize AICPA education as appropriate to professional practice.

Educational purists like to make a distinction between the education offered by colleges and the training offered by industry, but such distinctions are difficult to maintain. Non-collegiate organizations have moved into education almost as fast as colleges, especially community colleges, have moved into training, and the distinction is now blurred beyond usefullness--at least when applied to providers. Colleges are heavily involved in training as well as in education, and the programs of many corporations contain as much emphasis on theory, research, and personal development as those of any business school.

A related blurring of educational functions occurs in the distinction between credit and non-credit learning. Colleges are not the only educators to offer degrees. Within commuting distance of us here in Boston are four new degree-granting programs founded by non-colleges--a hospital, a banking institute, a consulting firm, and a computer manufacturer. While the image of degrees offered by non-colleges is still mildly sensational, the movement of collegiate institutions into the realm of non-credit instruction is now commonplace. Over the past decade, the number of colleges offering non-credit instruction more than doubled, rising from 1100 colleges in 1968 to more than 2400 in 1978. Today it is the norm rather than the exception for degree-granting institutions to be involved in non-degree instruction.

But whether a course was originally taken for credit is not especially important today. It is increasingly easy to convert non-credit learning into college degrees. Just a decade ago, only about a third of American colleges granted credit if students could demonstrate on standardized examinations that they knew the material; today 84 percent of all colleges grant credit for CLEP examinations. Ten years ago, only 14 percent of the colleges would consider granting credit for experiential

learning; today 41 percent do (Stadtman, 1980).

Historically, colleges have been reasonably generous in accepting credit from other colleges; today they are increasingly likely to endorse learning regardless of its source. The American Council or Education's Office of Education Credit lists over a thousand courses offered by more than a hundred corporations that appear worthy of college credit.

All of these practices, of course, are premised on the assumption that learning outcomes can be evaluated and that what students have learned is more important than where they learned it or how long it took them. In practice, traditional education is increasingly accepting the fundamental premise of competency-based education, and in so doing is moving closer to laying the groundwork for the linkages that are called for in your conference theme.

Linkages, however formed, will be concentrating on serving the needs and interests of an increasingly motivated and articulate adult education market. Thus it behooves us to know something about that market. Who are the adult learners who are signing up for classes, workshops, short courses, tennis lessons, and other forms of organized instruction? With all of the research surveys of the past decade, we do not lack descriptive data. In the 1970s, most states conducted needs assessments to aid in planning and coordinating education programs in the state. In synthesizing data across those studies (Cross and Zusman, 1978; Cross, 1981), I found that patterns of participation and interest were remarkably similar from state to state. That similarity makes it possible to present a national profile of the characteristics and educational interests of adult learners.

A profile, of course, is a statistical average which ignores the tremendous diversity of the adult population, and it doesn't purport to describe any real person who ventures into a workshop or classroom. Nevertheless, statistical summaries do serve to put together, as our individual experiences cannot, a generalized

picture of a typical adult learner. The typical learner I am about to describe is the person who engages in "organized instruction" offered by schools and colleges, employers, professional associations, community groups, or any other provider of adult education.

Using this definition, a national survey (Carp, Peterson, and Roelfs, 1974) found that approximately 30 percent of the adult population can be classified as active learners, and another 46 percent can be called would-be learners, i.e., those who are not currently participating in instructional activity but who express an interest in doing so. For all of our idealism about education for personal satisfaction and fulfillment, adult learners are primarily interested in increasing their competency to perform their daily tasks. Fifteen years ago, the classic study of adult learners concluded, "the major emphasis in adult learning is on the practical rather than on the academic; on the applied rather than the theoretical; and on skills rather than on knowledge or information" (Johnstone and Rivera, 1965, p.3). Nothing in the myriad of surveys since has changed that general conclusion. Adults are, by and large, pragmatic learners, more interested in learning how to do things than in how to think about them. Learning that is relevant to jobs is far and away the most popular type of learning, with almost half of all adult learners engaged in it. Learning skills for family living and recreation, however, are the most rapidly growing subjects.

What people want to learn influences how they want it taught. Most people would prefer to learn how to fix a car by actually working on one. If the learning is in history, however, then classes and reading may seem more appropriate. Thus the diversity in preferred instructional methods equals the diversity of subject matter interests. Generally speaking, however, most people seem

to like teaching methods that are familiar to them. Traditional lectures and classes, for example, lead any other single method in the preference polls, but actually three fourths of the potential learners would prefer something other than the traditional class lecture. On-the-job training and internships are popular, as are institutes and workshops, and the demand for these more active forms of learning appears to be greater than the present supply.

While media instruction such as radio, television, and audio or video cassettes are not rated very attractive by most survey respondents, I would not underestimate the potential impact of these new delivery systems on the Learning Society. Their chief handicaps at present are lack of familiarity as learning tools and lack of opportunity for personal interaction. But these handicaps must be weighed against the advantages of tremendous convenience and the potential for exceptionally high quality instruction. Furthermore, as technology becomes more familiar, its popularity is rising. There is some evidence that the most likely future users of the various technologies are past users. While I think it highly unlikely that computers and television will ever replace human teachers and counselors, it seems apparent that the new technology has an important role to play in the Learning Society.

As a matter of fact, all indications are that the new technology including educational television, will stimulate rather than satiate adult learning. One of the clearest and most consistently reported findings of the research on adult learning is that the desire for learning is addictive and apparently insatiable. Being introduced to something or knowing a little about it usually stimulates the desire to know more. In that simple fact of life lies one of the greatest problems for the Learning Society. It is quite clear now that the people taking the greatest advantage of the new educational opportunities are those who are already among the best-educated adults in the nation. A college graduate is seven times as likely to be participating in some form of organized

learning as a high school dropout, and the gap between the well-educated and the poorly educated is widening rather than narrowing as the Learning Society picks up speed. The almost certain result is that as opportunities grow, so will the gap between the educational "haves" and "have-nots."

The situation is far easier to understand than to remedy. Almost everything the college graduate does adds to the probability of further education, while almost everything the high school dropout does militates against it. The college graduate frequently enters an employee training program, works for a company or in an occupation that is likely, not only to support, but to require further education. College graduates typically belong to social and professional groups that discuss educational opportunities; spouses and friends are supportive and admiring of educational accomplishment. And finally, those who continue with school long enough to graduate from college were usually happy and successful in school and are familiar with the procedures and people that inhabit educational institutions.

The situation is exactly the reverse for the poorly educated. They enter low-paying jobs with few educational requirements and usually no educational benefits. They consort with friends and family who know little about education and may even be hostile to it; they lack the information networks to know about opportunities and the skills to take advantage of them. They are on the downward spiral with respect to education, and they become the hard core undereducated, taking up lifestyles and values that spawn new generations of undereducated. This is a tough problem and one that no provider of educational opportunities can solve alone. It requires linkages that work, and working linkages come in three basic models. First there are linkages that work for organizations. Colleges and businesses, for example, are finding mutual benefits in sharing resources. Colleges have expertise in course development

and instructional methods that are expensive for business to develop and maintain. Business has practical experience and relevant and current equipment that is impossible for colleges to duplicate. Linkages make sense, and a recent survey (Young, 1981) reported that 40 percent of all community colleges have working agreements with industry that are mutually beneficial.

A second linkage model that works is of growing importance to individuals. In a mobile society where adults learn from a wide variety of providers and experiences, it is important to be able to develop a coherent lifelong plan for education, one that is transportable and cumulative. The increasing willingness of educators throughout the Learning Society to look at the outcomes of learning and to measure competencies rather than semester-hours is the backbone of a linkage system that permits individuals to accumulate educational experiences toward credentials as well as personal growth and development.

Finally, there is a linkage that has not been much discussed but that I believe works for society. One of society's major problems now is the delivery of education to those who most need it, i.e., the undereducated. There is good reason to think that there is a hierarchy of threat in educational opportunity and that adults will enter the Learning Society at the threat level that is tolerable for them (See Cross, 1981, Chapter 6). We know from research, for example, that adults who build self-confidence as learners by taking a television course at home are likely to venture out to try other forms of education as their interest and confidence grow. Similarly, adults who participate in various forms of job training may discover interests and abilities that carry them over into other learning opportunities. If the Learning Society is to serve all adults, we need to nurture a varied system of entrances into educational opportunities.

The adequacy of the variety of the opportunities available will depend to a great extent on the cooperation and linkages developed by educators across the broad spectrum of providers.

Unfortunately, for many poorly educated people, adult education has the task of undoing some of the attitudes built up by the competitiveness of the formal school system. Learning, when it is graded on the bell-shaped curve, always leaves 50 percent of the class designated as "below average" learners. It is those below average learners who drop out of school early, thereby compounding their problem of low skills and poor attitudes about themselves as learners. To reexpose these students when they become adults to non-threatening, satisfying forms of education is a high priority task to which all educators should give serious attention. But the problem seems most amenable to solution through competency-based approaches to education because its goal is the production of competence rather than the sorting of people. Let me illustrate the difference through an analogy.

My story is about a furniture company that is organized like a traditional college. Just as education is geared to completing semesters rather than learning tasks, so this company is geared to completing days rather than chairs. It is the day that determines the work cycle of packers, shippers, billers, and all of the administrative officers of the furniture company. Chairs are sent along at the end of each day in states of completion that approximate the normal curve. A few chairs are nicely finished; most chairs have a weak rung or a missing screw here and there; some chairs are missing critical elements such as a leg or a backrest; and a few chairs are nonfunctional because the seat is missing. But the company is organized to produce a large number of average chairs, and its obligation to customers is to label the quality of their chairs--which is admittedly a different goal from producing quality chairs.

Now one fine day a new president comes to the furniture company. It is her notion that the goal of the company is to turn out

quality chairs. To do this she realizes that the whole organization will have to be redesigned. Completed chairs will henceforth be the goal, and chairs will be sent to the next station when they are completed rather than in various states of completion at the end of each work day.

Well, when the new plans were announced, there were massive complaints throughout the furniture company. The first to complain were the graders, and their complaints were numerous. In the first place, when each chair had to be completed before being released, chairs might be coming along every 15 minutes instead of 30 in various states of completion at the end of each work day. Even though it was perfectly possible for the registry of chairs to register each quality chair as it came along, graders had been batching for so long that they really believed that it was less efficient to maintain a steady place throughout the day than to cope with their present peaks and valleys of workload.

The inspectors were the next to complain. Having 30 chairs all at once, they said, permitted them to make comparisons so that they could tell a good chair from a bad one and thus fulfill their responsibility to the customers to clearly label the relative quality of their chairs. Then too there was the problem that inspectors could not be expected to make a new test for each chair as it came along, but if they used the same test continually, the word would be passed along and soon everyone would discover the criteria for grading chairs. Eventually everyone would be able to produce quality chairs, and that wouldn't be fair. It is a little hard to understand why it would be unfair to make known the test used by inspectors to grade the chairs, but I think it had something to do with straining public credibility by producing too many good chairs. As everyone knows, most chairs produced by any given company must be average--otherwise you have inflationary standards.

The next problem in the reorganization of the furniture company was a policy issue that was presented to the Carpenter's Senate for resolution. Since some chairs required more work than others,

either because missing parts had to be individually tailored or because some woods were harder to work with than others, some chairs would cost more to complete. The question was, how could they justify spending different amounts on different chairs, especially when there was no assurance that the most costly chairs would bring the highest prices in the market place? While the independent consultant pointed out that in the current market, incomplete chairs were not selling at all well and that in the long run the extra money required to complete chairs would be more than justified because chairs could be used rather than assigned to the scrap-heap, the simple fact is that most carpenters don't like to work with difficult chairs because they usually require more ingenuity and longer hours.

And so the fable of the furniture company ends. Change is usually difficult and exhausting. It is probably more difficult to change the educational system than it is to change the furniture factory, but meetings such as this one should serve to clarify the issues and to aid in the search for solutions. Competency-based education is a solution to many of the problems that plague us as we move from traditional school-based education for a few years of life to the Learning Society, in which learning is cumulative, lifelong, and pervasive throughout society. Competency-based education speaks to the pragmatic interests of adults in performing their daily tasks with competence. It is transportable, meeting the needs of the mobile society, but more importantly, capitalizing on the versatility of the multiple providers of education. Competency-based education is more palatable than competitive education for most adults, but especially for those whom we most need to serve--undereducated adults, trying to make a living in a society in which the capacity and motivation for lifelong learning have become survival skills.

May the remainder of your meeting strengthen your resolve to improve competency-based approaches to education and may you find linkages that work for learners, providers, and society at large.

REFRENCES

Carp, A., Peterson, R., and Roelfs, P., "Adult Learning Interests and Experiences." In K.P.Cross, J.R.Valley, and Associates, Planning Non-Traditional Programs: An Analysis of the Issues for Postsecondary Education. San Francisco: Jossey-Bass, 1974.

Cross, K. P., and Zusman, A., "The Needs of Nontraditional Programs." In C.B.Stalford (Ed.), Papers on Nontraditional Education 1977. Washington D.C.: National Institute of Education, 1978.

Cross, K. P., Adults as Learners. San Francisco: Jossey-Bass, 1981.

Johnstone, J.W.C. and Rivera, R.J., Volunteers for Learning. Chicago: Adine, 1965.

Luxenberg, S., "Education at AT&T," Change, 10 (11), December/ January, 1978-1979. pp. 26-35.

Stadtman, Verne A., Academic Adaptations: Higher Education Prepares for the 1980s and 1990s. San Francisco: Jossey-Bass, 1980.

Young, Robert B., "The Evolution of Community Education in Community and Junior Colleges." In Jellison, Holly M., Ed., A Look to Future Years: Prospects Regarding the Scope and Process of Community Education. Washington, D.C.: Center for Community Education and American Association of Community and Junior Colleges, June, 1981.

John H. Lawson
Commissioner of Education
Massachusetts

On behalf of the Massachusetts Department of Education, I am pleased to welcome you to New England Day of the National Competency-Based Adult Education Conference. It is with great pleasure that my first official appearance as Commissioner of Education should be at a gathering of such outstanding leaders in the area of competency-based adult education. The department is particularly pleased to welcome our many neighbors from the surrounding New England states.

"It is quite possible that lifelong learning now outranks motherhood, apple pie and the flag as a universal good," wrote K. Patricia Cross, keynote speaker at the opening session of this national conference. Lifelong learning, defined as "organized instruction" by some, or as "independent learning projects" by others, has penetrated the vocabularies of such diverse institutions as local school districts, health organizations, the high technology industry, labor unions and state government. The very diversity of those who speak for adult education and who plan, administer and evaluate its programs is evidence that adult education has indeed arrived and will not depart. Adult education is the fastest growing segment of education; some estimate that more adults are engaged in some kind of educational activity than the total number of youth enrolled in our public schools.

In FY 1980, in Massachusetts, one-sixth of the total enrollment in public schools was adults -- adults in basic education, in citizenship classes, in practical arts, in general enrollment. More than 60% of the adults participating were enrolled in general interest classes -- which includes courses from flower arranging to parent effectiveness training. And these enrollments continue to grow.

However, looking at another statistic will give us a profile of another aspect of adult education. There are more adults in Massachusetts without high school diplomas than there are children enrolled in public schools. And this figure is not static. The number of undereducated adults is increasing by an estimated 50,000 a year counting 20 to 30,000 immigrants, migrants and high school dropouts.

Within the past two years, 21,000 refugees from Southeast Asia, South America, Cuba, Haiti, and Eastern Europe settled in Massachusetts. Surveys of these groups demonstrate dramatically that 15,000 adults need survival english, life-coping skills, and vocational training. Sixty percent of this population also requires aid to families with dependent children. This is only one small but highly visible segment of the 1,400,000 adults without a high school diploma.

The facts about adult illiteracy and undereducation in Massachusetts are compelling: approximately one-third of adults over 25 do not have diplomas. According to the census data from 1970, about 41% of family heads of the Massachusetts labor force have no high school diploma. This level of education severly limits entry into the labor force which increasingly needs skilled people for jobs in high technology.

In 1977, at least 46.5% of mothers receiving aid to families with dependent children did not have a high school diploma, further evidence of a relationship between levels of educational attainment and indices of economic dependency, such as welfare status.

In 1977, 69.3% of all inmates in the custody of the Department of Correction had no high school diploma, illustrating the relationship between low levels of educational attainment and incarceration for criminal activities.

If these human and social consequences of undereducation do not speak eloquently by themselves, what of the basic costs we all understand?

The costs to Massachusetts of not educating the population of 712,334 illiterate males, 25 years and over, who had completed less than eight years of schooling as reported in the 1970 census are estimated at: 13.3 billion dollars in foregone income over the lifetime of the men, and 1,49 billion dollars in foregone tax revenues to Massachusetts.

Clearly, no one -- not the individual, not the family, not the community, not the state -- can afford illiteracy.

How has the Massachusetts Board of Education responded to these needs for basic education? In 1979, the Massachusetts Board of Education adopted a policy on adult education which documents the board's views on the importance of adult education in the educational process. The Board's policy stated that "if we are to realize the full value of our investment in education, we must provide lifelong learning opportunities."

Specific steps for the Board of Education were listed. Because of fiscal constraints, the board suggested priorities for the use of limited state resources. The board recommended a three-tier program approach to adult education. This approach coincides with all that we know about adult learning opportunities. In order of priority, the three-tier approach should be:

a. basic educational emphasis
b. work-related training
c. general interest education

State aid, which in fiscal year 1979 was approximately $3.2 million, the bulk of which, was directed toward general interest education, should reflect these program priorities; adult education programs should be part of the pupil weighting system for state aid.

Funding for basic educational emphasis courses and work-related courses should be free of charge to adults and should receive state aid. Programs of an enrichment or recreational nature offered for personal interest should support themselves.

The Board of Education is submitting for the third time legislation that will establish a uniform system of adult education. The legislation does not require the authorization or appropriation of new monies, but redirects currently available state aid. The board believes that this legislation will redress inequities among adult education offerings and will address the education and training needs of those 1.4 million adults without a high school credential.

The department has vigorously supported flexible and diverse services for those populations most in need -- the home-bound, the elderly, the out-of-school youth, the unemployed, the incarcerated, and the geographically and culturally isolated.

In fiscal year 1981, approximately 20,000 adults were enrolled in federally funded adult learning centers in public school buildings, hospitals, a church, community-based organizations, libraries, prisons and jails. The Department of Education, which is responsible for the management and admisistration of these funds, has taken major steps in the past three years to revise and reorganize its system for reviewing proposal applications. As a result, the department has awarded grants to new providers which include community-based organizations. These CBO's provide services in the neighborhoods of low-income, non-traditional learners and services which are culturally suited to the immigrant population, which is generally made up of non-English speaking adults who have been disenchanted with conventional educational systems. The department also funds programs in twelve county jails and nine state correctional institutions where the target population is in serious need of basic skills.

Last year, 30% of the adults served by learning centers learned to speak english and another 45% learned basic reading, writing, and math skills. Of the 37% who were unemployed upon enrolling in a program, more than half found jobs. One-third of the adults received a high school credential, 2,000 incarcerated adults; 6,600 immigrants; 3,700 adults receiving public assistance all participated. It is obvious that these programs reach those adults most in need and that adults can and do achieve.

In fiscal year 1981, the Department of Education awarded 11,500 General Educational Development (GED) Certificates, a 71% increase since 1976. The department's commitment to local test centers with flexible schedules and convenient and accessible locations produced

these startling results. Seven alternative adult credentialing programs graduated 277 adults with a regular high school credential. These seven programs, which will be presented in depth in a workshop later today, provide new opportunities for competent adults to earn high school diplomas through the assessment of their learning, whether that learning occurred through formal or informal experiences.

Through the department's correspondence course program, 880 people enrolled in both credit and non-credit courses including preparation for the G.E.D. exam and high school english. More than half of those enrolled are inmates of prisons and jails.

The department supports adult education teacher training programs in two ways -- one at Worcester State College which offers credit and non-credit courses for adult educators at local school and community sites. The other is the Commonwealth Inservice Institute which funds inservice education programs which are designed by and for school and community-based organization staffs. One recently funded Commonwealth Inservice Institute grant is providing training to volunteer tutors in Boston's Chinese/Indochinese community. Volunteers and teachers are learning methods and competencies in English as a second language instruction so that basic education services can be provided to adults who, because of family or work responsibilities, cannot attend regular classes.

Two innovative community-based cable television projects, one in a rural setting - the other urban, which bring adult education directly to the community are supported by the department.

The department is committed to meeting the educational needs of adults and to giving special attention to the illiterate and undereducated.

SYNOPSES OF WORKSHOPS

EVALUATION OF COMPETENCY-BASED PROGRAMS:

HOW AND WHY

by

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Evaluation of competency-based programs is similar in most ways to evaluation of traditional educational programs. After all, educational programs share more similarities than differences in the things we want to know about them, things like, "How well do students achieve the goals set for them?" "How effective are instructional staff?" "How cost-efficient is the program?"

However, competency-based programs also offer unique problems due to the necessary emphasis on assessment of student competencies. While assessment is important in traditional programs, it is the centerpiece of competency-based programs.

There are two broad categories of purposes for evaluation: to justify the program, or to improve it. Frequently these two kinds of evaluation are called "summative evaluation" and "formative evaluation." In both broad types of evaluation, there is always a descriptive component and an evaluative component. The facts of the program are gained incrementally throughout the course of the evaluation. Judgments are made, based on the facts that are gained, as to what is working well and what is not.

Before an evaluation can be designed, the audience(s) of the evaluation must be identified. The information needs of the major audiences will determine the issues to be explored in the evaluation. An issue is simply a concern about the program held by the audience of the evaluation.

Once the audience has been identified--and there may be more than one--the issues the evaluation will focus on can be identified. This is done by carefully discussing with the audience(s) what their information needs are, what aspects of the program they are most concerned about. It does little good to collect data on student achievement for state education officials whose real concern is resource management. No matter how complete or persuasive the student achievement data are or how elegantly presented, the audience will be unimpressed since its information needs have not been met.

There are two major measurement issues of interest in CBE: validity and reliability. These, of course, are just as important in traditional testing, but there are better-established procedures for assuring validity and reliability in norm-referenced measures. Since validity is an issue most often of interest during program development, we will not consider it further here. Reliability is the degree to which the assessment results remain stable from one testing situation to the next. This is called test-retest reliability, and it becomes somewhat problematical in CBE because of the emphasis in CBE on demonstrating competencies.

This means that three things are necessary for reliability in CBE assessment: the assessor must clearly understand the behavior to be elicited; the conditions under which the assessment is conducted must remain constant each time; and the criteria for evaluating the participant's performance must be applied the same way each time. In effect, each of these three elements of the assessment must be carefully codified so that ambiguity is eliminated as completely as possible. Subjectivity is a danger in CBE assessment because it is up to the assessor to hold behaviors, conditions, and criteria constant for every participant every time. This can be avoided in traditional paper and pencil, machine-scorable tests.

Consequently, ways must be found in CBE for assuring inter-rater reliability. This becomes a formative evaluation activity and it is ongoing. As long as a program continues and especially as it expands, ways of assuring inter-rater reliability must be found.

Site visits are conducted to all New York State External High School Diploma Program sites to insure the faithfulness of program replication. EDP Research and Training staff do a number of things to insure inter-rater reliability:

1. A random sample of completed candidate portfolios from each assessor at the site is selected. A random sample of assessment items in each portfolio is examined by the Research and Training staff, and a comparison is made between the assessor's evaluation and the reviewer's evaluation. A percentage of agreement is established for each assessor.

2. Interviews are held with all program staff to assess staff knowledge of program principles and procedures. This establishes the extent to which the conditions of the assessment are being held constant.

3. Reporting mechanisms, record-keeping procedures, and overall center functioning are examined, again to assure that the conditions under which the programs are delivered are the same conditions that are obtained at all other EDP centers.

GRASP: GIVING RURAL ADULTS A STUDY PROGRAM

by

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Lack of transportation and lack of contact with educational services are dual problems of the rurally isolated, often economically and educationally disadvantaged, adult. GRASP is a regional program covering four rural counties in northern New York State. It is operated by the Washington-Warren-Hamilton-Essex Counties Board of Cooperative Educational Services (BOCES) under a specially funded ABE Section 310 Federal project grant. It is designed to work in conjunction with any regional social service agency which has identified and/or serviced rurally isolated adults. These adults are referred by the agency to GRASP for educational counseling.

After the initial counseling session, a client is given the option of several educational programs. A special feature of GRASP is a packaged ABE/GED Home-Study program which uses individualized, self-paced assignments and materials. The client who chooses the Home-Study program uses individualized, self-paced assignments and materials. The client who chooses the Home-Study, in addition to being self-motivated, should have a standardized reading score of 6.5-8.9, and either a lack of transportation to on-site ABE/GED programming, a physical handicap, a work schedule conflict, or lack of child care.

GRASP wanted a free in-place delivery system which served the same basic geographic areas as BOCES and the participating social service agencies. This was found through a cooperative arrangement with the Southern Adirondack Library System (SALS) which makes the Home-Study option possible for an area covering 4,200 square miles with a population of 228,000 residents. SALS, one of 22 library systems state-wide, has 28 members, 2 deposit libraries, 1 reading center and Bookmobile services. GRASP envelopes for student pick-up and return are handled free of charge by regularly scheduled SALS delivery to the community libraries and twenty-two Bookmobile stops. Local community libraries often provide a space for the initial counseling/screening meeting, follow-up meetings, and a place for tutorial help when needed. The cooperation of the SALS staff, local librarians, Bookmobile librarians, and delivery personnel have all combined to make GRASP a unique, smoothly running Home-Study program.

An alternative free delivery source for those isolated areas not serviced by SALS is the BOCES bus, which delivers weekly to the 21 component school districts.

GRASP has been in place for 1½ years and has proven that a regional cooperative effort by social service agencies, BOCES ABE/GED staff, and library personnel can combine to provide the rurally isolated adult with viable educational services. This project is ready for replication and could be used equally well with urban adults who have the same economical and educational disadvantages as their rural counterparts.

AN ADMINISTRATOR'S EXPERIENCE:

INTEGRATING COMPETENCY-BASED CURRICULUM INTO A CARNEGIE UNIT SYSTEM

by

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Background

Over a period of three years, a group of twenty teachers, counselors and administrators met, discussed, argued and finally developed a program which would allow competency-based education to be incorporated within the traditional credit structure. The personnel involved in this program were mostly adult educators but several were from the continuation and comprehensive high schools in the district. They also represented diversity in assignments: some from traditional English and math, science and government assignments; others from individualized learning labs in Adult Basic Education and diploma subjects; finally, some whose primary assignment was ESL.

Although the emphasis of our work was to develop a program and materials which would help adults to become functionally competent, the diversity of personnel working on the project was responsible for our product to also have application for students in continuation and comprehensive high schools. In addition, the instructional materials may also be used successfully in traditional classroom settings as well as the Individualized Learning Labs, for which they are best suited.

Program Description

The four courses: Functional Government; Functional English; Functional Mathematics; and Functional Science are each designed to be a one semester, 54 classroom hour - 5 credit (½ Carnegie Unit) course. Of course, because we are dealing with a competency-based philosophy, competence may be demonstrated in each course in any number of hours. Competency will be measured by performance on the tests in each unit. Each teacher, school or district may determine the level of performance appropriate for their program. Seventy percent is a suggested minimum passing score.

Although 180 semester credits (18 Carnegie Units) are required for the Adult High School Diploma in the Montebello Adult Schools, and these four courses are only twenty units of this total, we believe that the scope of the competencies are impressive in preparing adults for life-skill competencies.

We don't require that all graduates take all of these courses but if any one of these subject areas are required for a student's graduation, we then assign them to the functional course rather than another traditional program.

Learning Packets

Each of the Learning Packets is a self-contained unit one for each of the 42 competencies. The 42 packets are divided in this way: Functional English-10 packets; Functional Government 9 packets; Functional Mathematics-10 packets; Functional Science-13 packets. Some of the titles are: "Newspaper Reading Skills"; "Job Applications and Appropriate Interview Behavior"; "The Voting Process"; "Preparing Income Tax Return 1040A"; "Consumer Purchasing Using Decimals"; "Nutrition, Drugs and Alcohol"; "First Aid".

DEFINING ADULT READING COMPETENCE: IMPLICATIONS FOR ASSESSMENT, INSTRUCTION, AND MATERIALS

by

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Defining adult reading competence is a complex task. Some educators would suggest that reading competence is defined by a universal standard established by society. Others would argue that reading competence cannot be defined or measured by a universal standard; but, instead, it is highly dependent on the interaction of the individual readers and their environmental demands. Yet others would argue that readers are considered competent when they reach their level of capacity for understanding print.

Not only are there problems in defining competence, but the entire issue is further complicated by the disagreement of reading theorists and experts on a definition of reading. The varying definitions of reading represent divergent theories that attempt to explain how reading occurs and, thus, very different implications for how reading should be taught. Material selection and assessment strategies are also influenced by the theoretical view one adopts.

All theories can be categorized into one of three major theoretical views. The "bottom-up" or "text-driven" view defines reading primarily as a process of decoding written symbols to the sounds that they typically represent. Thus, word parts and words are processed individually and sequentially and meaning derives directly from them. In contrast, the "top-down" or "concept driven" view suggests that readers start with hypotheses and then attempt to verify them by processing the stimuli. A third view suggests that reading is an "interactive" process where readers use both the text and information about their world to process meaning of print.

This author classifies herself as a proponent of the "interactive" model but strongly influenced by the "top-down" view. This position has several implications for the practioner. Instructional strategies have to include more than the teaching of decoding skills or the teaching of other isolated skills. The practioner also becomes concerned with the readers' thinking and reasoning skills, language proficiency, attitudes, self-concept, and knowledge and experiential base. Comprehension is stressed rather than the pronunciation of words. In addition, the processes of interpretation that a reader employs becomes just as important as the product of interpretation.

Materials need to be relevant and within the realm of the readers' experiential or knowledge base. If they are not, the instructor/facilitators need to help read readers prepare for a selection to read or teach readers to prepare themselves. Pre-discussions, films, guest speakers, questioning strategies, and teacher "modeling" are all appropriate techniques that can be used to facilitate comprehension.

Assessment strategies need to include an examination of the readers' goals, the task demands that are imposed on the readers by their environment, the language skills, and the affective needs of the individual.

In conclusion, reading is a very complex task. It is a process that is dependent on the interaction of reader, text, and content variables. It is the opinion of this author that the field of reading and adult education have just begun to define those competencies required by adults to process print.

A COMPETENCY-BASED ADULT READING MANAGEMENT SYSTEM

by

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The N.J. Adult Reading Project was funded by the N.J. State Department of Education to develop a system which could be implemented by New Jersey's adult education programs in order to provide competency-based reading instruction to adults. The project's first year consisted of research and planning and included a statewide needs assessment of New Jersey's adult education teachers as well as a colloquium of experts in the field of adult education and/or reading.

The project's second year consisted of product development and resulted in five products: 1) Adult Interest Assessment Processes (designed to help students identify their goals), 2) An Adult Reading Skills/Competencies Assessment Process (designed to identify the skills and competencies students need to meet their goals), 3) An Adult Reading Skills Array (a listing of the skills needed for adult reading tasks), 4) An Adult Reading Inventory for Educational Selection (a descriptive listing of competency-based adult reading materials and information), and 5) Adult Functional Word Lists (lists of words relating to particular competencies). Each of these products was identified as a need by an analysis of the project's teacher needs assessment. After initial development, each product was field tested by adult educators and their students and was subsequently revised on the basis of feedback from the field testers.

In this, the project's third year, the revised products are undergoing their final field testing as an integrated management system. Eighteen adult education programs throughout the state of New Jersey are participating in the implementation of the Competency-based Adult Reading Management System and the system's summative evaluation process.

Adult educators in New Jersey and throughout this country have consistently demonstrated their willingness and ability to provide leadership in the areas of innovative and effective instructional products, processes and programs. Most adult educators have embraced the philosophy of and implemented individualized instructional programming in order to meet students' needs effectively and efficiently. The Competency-based Adult Reading Project is a "next step" in our goal of best serving the adults in our programs. It is one way to provide each adult student with "personalized" as well as individualized instruction. It is a "framework" within which students can be assured that they will be developing their reading skills within the context which will best suit their own personal interests and goals.

DEVELOPING AND ASSESSING VOCATIONAL COMPETENCE USING APPLIED PERFORMANCE TESTS

by

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The educational process has developed and evolved to keep in step with the pace and demands of this society. In the late sixties and early seventies innovation and experimentation were in vogue. But as the economic base diminished so did the interest in experimentation and innovation. Program planners including educators were required to document the effectiveness of programs. The philosophy of competency-based education was developed in response to the queries which demanded that educators had to provide proof that students were learning.

This paper: (1) examines the foundations of competency based education movement especially as it relate to adult and vocational education; (2) outlines the steps taken to devise an effective method of assessing accurate cost-free vocational assessments, and (3) provides the reader with some applied performance tests in the areas of auto mechanics, barbering, clerk typing, cosmetology, dental assistant, dressmaker/seamstress and family resource manager. These applied performance tests are currently being used in the External High School Diploma Program in the Division of Adult and Continuing Education and Staff Development in the Public Schools in the District of Columbia.

This examination and these instruments could be extremely helpful in meeting some of your needs in developing, comparing and evaluating current practices in your educational programs.

OREGON COMPETENCY-BASED HIGH SCHOOL DIPLOMA FOR ADULTS: DEVELOPMENT, IMPLEMENTATION AND DISSEMINATION

BY

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The Oregon competency-based adult high school diploma represents an effort to design an in-depth process for the assessment of life-skill competencies. The model was developed to provide an alternative for adults whose experiences as citizens, consumers, producers, workers, and family members contributed substantially to their ability to function successfully in today's society.

The terminology utilized in the model reflects the philosophical base upon which it was conceived. "Demonstration opportunities" allow students to show an assessor what they have learned and what they know by displaying their proficiency in both "on-site" and "off-site" demonstrations. Should students fail to attain the required standard of performance, they can participate in a "learning opportunity" to gain the necessary skills to redemonstrate their competence at a later date.

All of the materials which were designed for the project are utilized by an assessor--a person designated by the institution to perform a two-fold function. As an evaluator, the assessor verifies individual competence accord- to clearly established standards and maintains a portfolio to document and chronologue student progress. As a resource person, the assessor acts as a facilitator to refer students to appropriate agencies, tutors, programs, or classes whenever additional learning needs to take place.

All of the demonstrations required for certification are closly associated with familiar life situations. The forty-five requisite competencies are organized under four umbrella themes--Work, Daily Life, Travel, and Self-Awareness. Some competencies are assessed in more than one life-theme area. This provides a measure of validity and eliminates the need for "spot-checking" to validate competence.

The Oregon model is packaged for immediate use and includes the following:

1. Four Candidate's Guides (one for each life theme)

   The guides include information written specifically for the student. They explain why each demonstration is important, they provide an introduction to the project, and describe the standards for evaluation of student performance.

2. Four Assessor's Guides

   The assessor's materials provide guidelines for the acceptance of student responses, worksheets for documenting information in the candidate's files, and instructions for conducting competency evaluations. Background information is also included which explains the philosophical base upon which the demonstration opportunities - were created along with training materials for assessor assessors to update their knowledge base.

3. Readiness Assessment Instrument

This self-assessment tool is utilized in the intake procedure to help determine if an entering student will be able to demonstrate the competencies, or if some additional prior learning should take place. However, both learning and demonstrations may take place simultaneously as the entire model is self-paced, open-entry, and open-exit.

Competency demonstrations are performed in a variety of ways and settings so to include a variety of written, oral, experiential and performance-based activities. Training workshops and additional project information are available through Oregon State University, Department of Adult Education.

CALIFORNIA'S COMPETENCY-BASED ADULT EDUCATION NETWORK: AN OVERVIEW OF EXEMPLARY PROGRAMS

by

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Bill Ririe
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The California Dissemination Network for Adult Educators, funded under the auspices of ACSA, Foundation for Educational Administration offers information, inservice training and technical assistance in the areas of:

* Adult Basic Education (ABE)
* Assessment
* Competency-Based Education (CBE)
* English as a Second Language (ESL)
* Vocational English as a Second Language (VESL)

DNAE will provide all adult educators with exemplary program information as well as the means by which these programs can be implemented at your teaching site.

Should you choose to adopt one or more programs, a facilitator will be sent by DNAE to your site for an inservice workshop to explain the procedure of implementation. You will be provided with as much technical assistance as needed to make the program functional at your site. In addition, a follow-up evaluation of the implementation will be conducted by DNAE.

DNAE was developed as an agency whose primary responsibility is to locate, screen and make available for adoption exemplary programs for adults, thereby acting as a clearinghouse designed to serve teachers and administrators. DNAE functions in two primary main areas: INFORMATION DISSEMINATION and PROGRAM ADOPTION.

The Information Dissemination component is designed to keep you aware of current products, programs, conferences and workshops relevant to you. To achieve this, each adult education site will have a designated key contact who will act as an information liaison to assure that DNAE materials reach all teachers and administrators. Once on our mailing list, teachers will regularly receive a copy of the DNAE NEWSLETTER containing descriptions of instructional materials and a calendar of events. In addition, each site will receive catalogs and brochures containing a descriptive listing of the exemplary programs available for adoption. Finally in order to assure that the flow of information is two-way, DNAE also maintains a TOLL-FREE telephone number (800-672-3494) and encourages inquiries and informational calls.

EVALUATION OF COMPETENCY-BASED ADULT EDUCATION PROGRAMS

by

Judith Alamprese, Office of Educational Research and Improvement
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Washington, DC

James Parker, Office of Vocational and Adult Education
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Washington, DC

The principle mechanism in the Dept. of Education for evaluating exemplary programs is the Joint Dissemination Review Panel (JDRP). The Panel examines evidence from education programs that claim effectiveness in attaining their goals and determines whether they have met their goals. Some of the questions that the Panel asks are:

-Has a positive change occured as the result of the program?

-Can the change be attributed to the program rather than to other causes such as normal maturation, regular educational programs, or other factors?

-Is the change educationally significant?

-Can the program be used in other locations with comparable impact?

To date, four Adult Education programs have been approved by the JDRP.

Once a program has received approval, it is elegible to apply for a grant from the National Diffusion Network (NDN). The NDN provides funding so that the program can be disseminated throughout the country in appropriate settings.

The JDRP process may not be feasible for many projects. However, adult educators believe there is a need for common methods of evaluating special projects. Compatible evaluation methods could promote the adoption of good practices and products, reduce duplications among projects, and increase our understanding of what works in Adult Education. Education Dept. staff are working with states to identify the range of evidence that projects could use to answer some basic evaluation questions. These questions were developed after considerable dialog with national, state and local AE practitioners and researchers. In addition, a review of evaluation instruments was conducted and data were incorporated. Project directors, state project monitors, and evaluation consultants may find these questions useful in determining the quality and potential impact of their projects. They are currently being tested with a variety of projects: assessment programs; curricula development; delivery systems; recruitment; counseling; and staff training programs (see attached list of questions).

1. In what way(s) does the project address the intent of the Adult Education Act?

2. In what way does the project address state and local needs?

3. How does the project identify intended participants?

4. In what ways does the project use resources effectively?

5. How do staff and learners share responsibility for goal setting?

6. How do staff and learners share responsibility for instruction?

7. How do staff and learners share responsibility for assessment?

8. To what extent is the administrative structure adequate for achievement of the objectives?

9. How are projects/practices/products written and organized for adoption/adaptation at other sites?

10. To what extent are the liaison activities and collaborations necessary for the success of the project clearly described?

11. To what extent is the record-keeping system adequate for implementing the practice/product?

12. How can parts of practices/products be used independently?

13. To what extent is the physical environment appropriate for the implementation of the practice/product/project?

14. To what extent is funding adequate for the achievement of objectives?

15. To what extent are the changes caused by the use of practices/products worth the money?

16. How are the costs for adoption identified?

17. In what ways can products/practices be incorporated into on-going programming without continued special support?

18. To what extent are the project's goals/objectives clearly defined and explicitly stated?

19. How is the process of practices/product implementation identified?

20. To what extent is the evaluation design/evidence appropriate for determining the project's success in reaching its goals and objectives?

21. How are the project's outcomes identified and documented?

22. To what extent are the project's successes due to staff characteristics that are replicable?

23. To what extent are the project's success due to program characteristics that are replicable?

24. In what ways are changes in participants' behavior caused by practices/products?

25. How are project costs documented?

26. To what extent is there a reasonable relationship of costs to changes?

EVALUATING INNOVATIVE ADULT EDUCATION PROJECTS:

HOW TO MAKE EVALUATION WORK FOR YOU

by

Dr. James Deegan
Metropolitan State University
St. Paul, MN

Greta Ploetz
Literacy 85
St. Paul, MN

Fears and misconceptions about evaluation -- perceiving evaluation as a punishment or as an exposé of faults -- often block effective evaluation in competency-based adult education programs. Other barriers to helpful evaluation, cited by Dr. James Deegan, include absence of criteria to measure success, lack of planning; and staff inexperience in research. Also, some program managers are unwilling to allocate money for evaluation purposes; they consider evaluation an expensive "add-on", or as taking away from program essentials.

Dr. Deegan shared ideas about the development, nurtutance and evaluation of educational innovations. Rather than advising programs to develop a single model or evaluation paradigm, Deegan suggested action-oriented, self-study principles that can be applied in any evaluation. "These ideas are not really new, revolutionary, or startling; they simply are not being used by many adult education program planners."

The self-study approach to evaluation provides a foundation for planning efforts, enhances program openness, and helps staff to assess progress in meeting goals and criteria. Basic characteristics of an effective self-study include the following components: motivation for the evaluation comes from within the organization, rather from an outside force; an informed attempt is make to clarify goals and assess achievement of the goals for purposes of improvement; there is representative participation by members of the various segments of the education community; and a readable report, potentially useful to several audiences is produced.

Sources of information and data can be derived from program interaction activities, such as anecdotal records provided by teachers, teacher meetings, end-of-activity surveys, advisory groups, student interviews, attrition studies and informal consultants. Data can also be gathered from program outcome activities, including student performance on criterion referenced tests, follow-up studies of graduates, teacher interviews, student exit interviews and student self-assessment.

Greta Ploetz described two innovative adult education projects and illustrated ways in which the self study approach was used in one model and how it is being incorporated into the development of a new project. The ADVANCE Competency-based Adult Diploma Program was developed as a 310 Project in the Mounds View School District's adult education department. The model features a competency-based curriculum in required course areas and the assessment of experiential learning in elective course areas. Guidelines developed by the Council for the Advancement of Experiential Learning (CAEL) were adapted for high school level learning. Self study techniques used included teacher observation, student perceptions and surveys, Advisory Board recommendations, and a portfolio review process.

"Dr. Deegan and I are now involved in the development of 'Literacy 85', a project designed to improve literacy and basic education services for adults in a large three county area of metropolitan St. Paul," Greta explained. The Literacy 85 evaluation process goes hand in hand with project development and the self study approach is being utilized throughout the project's activities. Several St. Paul foundations are providing funds for the five year project which will coordinate educational, corporate and human resources, promote a broad public relations effort, conduct research, and assist literacy programs in initiating self study evaluations.

In ADVANCE and Literacy 85, as with other innovative programs, a major goal of the self study evaluation process is the development of a better system of on-going, institutional research, self analysis and self improvement. Competency-based adult education efforts using this flexible approach can put to rest inhibiting "fears and misconceptions" about evaluation.

BUILDING LANGUAGE SKILLS ACROSS THE CURRICULUM

IN A FOUR YEAR COMPETENCY-BASED COLLEGE

by

Sharyn Lowenstein
Emilie Steele
College of Public and Community Service
University of Massachusetts/Boston

Although the literature strongly supports the need for basic skill attainment, there is much speculation on which particular skills to teach and how to teach them. Without definitive answers, each educational community takes on the challenge of promoting maximum skill attainment by offering the most promising learning environments for their institution and for their students. For the competency-based College of Public and Community Service (CPCS) at the University of Massachusetts/Boston that serves an urban adult population, the problem is made more complex. Adults returning to school after ten, twenty or more years, frequently face a difficult adjustment period requiring juggling of multiple and competing roles of parent, worker, spouse, and now student. Without firmly established study habits, confidence, and strong language skills, the adult student can be easily overwhelmed, and, in her perception, "fail".

Recognizing the challenge of teaching language skills, CPCS had been experimenting with the following: 1) We have developed a self-scoring, self-pacing diagnostic reading comprehension test packet, available to all students to use independently, with the option of a follow-up session with a faculty member to discuss the results. The test explanations identify and describe five reading skills -- main idea, tone, audience, definition of a word through its context, and locating information -- which aid students in developing a vocabulary to describe their areas of strength and weakness. As a whole, the packet encourages students' participation in their own learning, and many concepts used in the explanations are useful in reading throughout the curriculum. 2) We have build into the entry Assessment Program -- required of all incoming students and taught by faculty from all disciplines -- a writing program designed to strengthen fluency and self-confidence. Students and faculty write together, share their writing where appropriate, and discuss the end product itself, as well as their attitude about that product and about themselves as writers. 3) We have created The Language Place, which is staffed by the language faculty. It is used by students to work on competencies across the curriculum, and by staff and faculty to explore the teaching of language skills. The Language Place uses individual and small group instruction as well as ongoing workshops.

Each of these learning options helps students prepare for or work directly on finishing a competency. These options also emphasize learning as a process, and, in particular, help students to assess their individual learning approaches. Finally, we have found these options appropriate for the teaching of both basic and advanced language skills.

A CBE DELIVERY SYSTEM IN HIGHER EDUCATION FOR THE INCARCERATED

by

Susan T. Tydell
Kenneth M. Lampert
Metropolitan State University
St. Paul, MN

This session described a prototype competence-based college program in a correctional facility and reviewed implications for distance administration of adult learning programs through the use of new technologies. The first part of the session placed this topic within the context of a national perspective on education and corrections in general, and a perspective on education and corrections within the state of Minnesota in particular. In Minnesota, 79.5% of the inmate population has an educational level of 10th grade or above. The state's largest adult facility, the Minnesota Correctional Facility at Stillwater, has a population of 1,025 inmates.

For the past three years, Metropolitan State University and Control Data Corporation have participated in a unique educational program with Insight, Inc., an inmate managed, nonprofit corporation at the Minnesota Correctional Facility at Stillwater. Insight was organized in 1975 by inmates interested in pursuing college work. Since that time, 12 inmates have received baccalaureate degrees through the program from Metro U, the University of Minnesota, and the College of St. Thomas. Five additional students are scheduled to graduate in June, 1982. Insight has obtained permission from the prison administration to maintain itself as a separate living unit in one of the cell halls. With the exception of the four full-time staff members, all Insight students work at other prison jobs in the day and study in the reserved area during the evening.

Metro U's individualized, competence-based degree program for adult students has been a successful model for delivering educational services to inmates. Prospective students must satisfy Metro U's academic requirements and must also meet Insight's standards of conduct, observance of institutional rules, and commitment to the program. Academic advisement, degree planning assistance, prior learning assessment, and some direct instruction are provided by Metro U faculty. Other instruction is delivered via the Control Data PLATO system through terminals installed in the cellblock serving as the Insight living-study area. Students also have access to other resources including instructional units available through the Minnesota Educational Computing Consortium and the data-base for the automated card catalogues in the libraries of the six other institutions in the Minnesota State University System.

A review of implications for the future uses of new technologies included applications to other "distance learners" (e.g., homebound), uses as educational management tools, and uses in increasingly complex interactive learning environments.

(See also "A Special Demonstration: A Competence-based Higher Education Program in a Correctional Facility.")

A SPECIAL DEMONSTRATION: A COMPETENCE-BASED HIGHER EDUCATION PROGRAM IN A CORRECTIONAL FACILITY

by

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Kenneth M. Lampert
Control Data Corporation
Minneapolis, MN

This special session was a practical demonstration allowing "hands-on" experience with the educational program described in "A CBE Delivery System in Higher Education for the Incarcerated."

By using a Control Data PLATO terminal, an inmate-instructor was contacted at the Minnesota Correctional Facility at Stillwater. The inmate-instructor was also one of Metropolitan State University's students in the BA degree program at Insight. Using the PLATO "monitor" feature, the inmate-instructor displayed the records of several inmate-students in his computer programming class. He explained how those records were used in: 1) monitoring student progress, and 2) determining areas in which students had difficulties and required assistance. The records displayed are part of the PLATO Learning Management (PLM) system. This system provides the capability of managing entire curricula. Pre-test results are diagnosed and study prescriptions are generated addressing the individual student's needs. Post-tests are used to record student progress.

The inmate-instructor also guided Boston session participants through a simulation of a college-level chemistry experiment using the PLATO "talk" feature to tutor the participants in the proper method to construct and operate a distillation column. Handouts were available on the PLATO courses which Metro U accepts for transfer credit and upper-division credit. Several Metro U faculty members use PLATO lessons in other courses.

Other demonstrations at this session included the opportunity to interact with the Control Data Basic Skills curriculum, both as instructors and students. This curriculum provides individualized instruction in mathematics and reading from a third-grade to an eighth grade level. After enrollment in the program, a pretest is used to "place" each student at the appropriate level in the curriculum. Students then progress through the program via a series of tutorials, drill and practice sessions, and tests. At any time, students can review their own progress, and the instructor can monitor the records of the entire class to determine which students are experiencing difficulties and the areas of difficulty.

WHAT COMPETENCIES ARE MEASURED BY THE GED TEST?

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Since the early 1940's, the Tests of General Educational Development (GED) have been used to assess competencies believed to be representative of the typical outcomes associated with four years of a traditional high school program of study. The scores obtained by candidates have been integral to judging eligibility for the award of a high school equivalency credential. The dual foundation for these judgments of examinee qualifications has been the construction of the GED Tests to match the typical high school curriculum and the comparison of GED Test examinee performance to that demonstrated by recent graduating high school students.

Over the years, the content of the GED Tests has been updated to ensure that the competencies measured represent those currently held as educational objectives of the typical high school curriculum; the present editions of the Tests were developed to match specifications defined in the mid 1970's. The GED Test score scales have also been periodically updated by administering the battery to graduating high school students; the score scales currently in use were established by a norming study conducted in Spring, 1980.

The primary purpose of this paper is to provide a detailed description of the current GED Test specifications. The content of each of the five subject area tests on the GED battery (Writing Skills, Social Studies, Science, Reading Skills, and Mathematics) is outlined, and sample items written for the subcontent areas of each test are included. These content outlines and sample items exemplify the competencies necessary for successful performance on the GED Tests. The authors list many of these competencies under each subcontent area on the five subject area tests.

After presentation of the GED Test specifications, suggestions are offered for methods of designing effective curriculum for candidates seeking a high school equivalency credential. Selection and design of instructional materials and exercises are discussed.

LINKING ACADEMIC BASIC SKILLS TO JOBS:
A MODEL FOR CETA AND PUBLIC EDUCATION

by

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This presentation described two projects conducted by the San Mateo County Office of Education. The first was the Adult Competency Education (ACE) Project, funded by the Adult Education Act, Section 309 from 1975 to 1977. That project identified the reading, writing and math skills needed on jobs. The project used the job skill information to counsel adult basic education students to focus on jobs, and as the basis for individualized job-related basic skills instruction.

The second project grew out of the first project but was funded by the Employment and Training Division of the San Mateo County, the CETA prime sponsor. It has been funded since 1978 as the CETA Staff Development Project to

- develop a model for and train counselors to use group vocational counseling
- identify the math, reading, and writing skills required by CETA funded training and adapt the processes developed by ACE to provide individualized, open-entry, job-related basic skills instruction for CETA clients.

The workshop described the background, the counseling process and the instructional approaches as well as the assessment procedures used for both programs. The approach underlying both the ACE and the CETA system is the same--

1. using the task analysis to identify job related basic skills
2. matching that information against a preexisting taxonomy of measurable instructional objectives and
3. assembling that information in a manner that is useful to
   - A. students--for career exploration and counseling
   - B. counselors--as a screening device
   - C. basic skill instructors--as the basis for remedial instructional programs

FLEXIBILITY FOR ADULTS--INTEGRATING CBE INTO A TWO-YEAR TECHNICAL COLLEGE

by

Bonnie Prince
Hocking Technical College
Nelsonville, OH

A CBE approach in three instructional programs at Hocking Technical College in Ohio is addressing special concerns of adult learners: time commitments beyond their courses, apprehension about the currency of their academic skills, and pride mixed with uncertainty about the value of their independently achieved learning. Adults come to colleges seeking reaffirmation of their stature and status as adults, even as they submit to the role of "student" which carries uncomfortable connotations from earlier years (being a child, a dependent, a subordinate; submitting to the judgement of others; risking failure). Adults, in fact, seldom accept the mold of a college's standard prescription for acquiring a degree, but invent ways to shape existing learning structures to their own advantage and needs. To serve adults with sensitivity, colleges must design course offerings to meet both the logistical and philosophical concerns adults may have.

Hocking is accomplishing this, even amidst its central focus of directing programing toward its primary clientele, "traditional" eighteen year old, recent high school graduates. Three highly adaptable programs, each derived from CBE principles, currently provide adults with the flexibility they seek.

The College's PACE program offers a competency-based, open entry, self-pacing alternative format to "traditional" courses. Adult students enroll daily, set up schedules that coordinate with job or family, and learn in an individualized, adult-to adult, interpersonal environment. A second program is Credit for Prior Learning through Portfolio Development. Adults explore their skills acquired from job and community experience, match their accomplishments with existing courses (describing their skills in competency-styled statements of learning), substantiate their learning with assorted documents and then have their skills evaluated for direct course credit, by-passing enrollment in those courses. The third CBE-based program, Self-Directed Learning, allows adult students and instructors to develop alternative learning strategies through learning contacts to accomplish the competencies of traditionally offered courses, when non-classroom learning is more convenient or appropriate. These programs complement each other to provide flexibility in time, location and learning mode.

Hocking's success with these instructional innovations has derived from the creation of an identity for alternative education in the college coupled with deliberate interfacing with traditional systems. Attentiveness to adult needs for information, advocacy, and access plus concern for the selection and support of alternative instructional staff, and careful management of new course development contribute to implementing these programs.

THE MANY FACES OF CBAE-
A BRIEF REVIEW OF PRACTICE

Ruth S. Nickse, Ph.D.
Massachusetts State Department of Education

This workshop identified trends in competency-based educational practice in an effort to place competency-based adult education in a context, and to define its unique characteristics. Although there is probably no one definition or set of practices agreed upon by the diverse supporters of competency-based educators, there are some programmatic foci that distinguish one arena from another. Programs for youth at the secondary school level generally stress instruction and testing of basic academic skills in reading, writing and computation while college level practice stresses the acquisition and demonstration of generic skills, such as, problem solving, synthesis and analysis. In industry, training programs and assessment centers emphasize the development of job competence. In its interpretation, adult education chooses to stress a functional skills focus, eg; the application of academic and generic skills in real life contexts. Therefore, the content of such programs is practical, including finding a place to live, maintaining one's own and families health, finding and keeping a job, using community resources and understanding of citizens rights and responsibilities in the areas of government and law, for example.

> CBAE programs are characterized by two sets of variables (a) program components such as clear and explicit outcomes, pre and post-assessment, and certification of mastery, and (b) program orientations, including variable organizational structures and processes for instruction and testing, and an administrative philosophy based on the characteristics of adults as learners.

The workshop described current examples of practice in secondary education, college programs and in industry. Models of exemplary practice in adult education settings which include both instruction and assessment were reviewed in some detail. Credential oriented systems which grant diplomas, life skills instructional systems, and variations of CBAE systems for special populations were explored. In summary, the scope of competency based practice is broad. It is not solely an adult education phenomena, but a diverse movement which must create linkages and articulation between systems to further its growth.

LINKAGES: APPLICATIONS OF CBAE TO OTHER PROGRAMS FOR ADULTS

by

Elaine Shelton
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The major thrust of Dr. Dudding's presentation focused on the use of competency-based education, especially the Adult Performance Level Competency-Based High School Diploma Program, as an alternative delivery system to provide education for the economically and socially disadvantaged. Dr. Dudding explained that PROJECT ASSIST, a project funded by the Pennsylvania Department of Education through the Pennsylvania Advisory Council on Vocational Education, attempted to create linkages between CETA Programs and vocational-technical schools through the development of a network of APL Programs.

Along with a discussion of the successful programs that were started and the concomitant problems that were encountered in the process, Dr. Dudding outlined the following strategy employed by the Project's staff in effecting such cooperative programs:

1. The Project staff met with CETA executive directors to discuss the APL Program and solicit a commitment to explore the possible implementation of this program for CETA clients.
2. A similar meeting was then scheduled for the directors of the vocational-technical schools.
3. Upon ascertaining interest on the part of both CETA and vocational education, a meeting was then convened with school superintendents.
4. If all parties agreed that an APL Program would be feasible and desirable, these organizations agreed to send representatives to a statewide meeting to learn more about the program from the staff of the APL Project at the University of Texas at Austin.
5. After the statewide meeting, the PROJECT ASSIST staff helped to develop programs in which the CETA prime sponsor agreed to fund the program and provide the students, the vocational technical schools agreed to act as the program administrative agent, and the school districts agreed to offer the diploma.

Dr. Dudding indicated that their strategy helped to establish alternative high school diplomas which allowed students to use their vocational training toward achieving a diploma.

Dr. Dudding concluded by suggesting that the Project was not able to achieve its full potential because there ceased to be funding available with changes in federal legislation. However, he encourged the audience to employ this strategy by using a variety of other possible funding sources.

Col. Anderson then addressed the linkage issue from the standpoint of competency-based education's answer to contraints from the human resource and the military perspective:

Bureau of the Census population projections into the mid 1990's and basic educational trends indicate--a decline in the 17-19 year old group (prime recruiting target population), an increase in the number of US population with limited English language proficiency, a decline in aptitude and achievement test scores.

Many factors influence the relationship between the declining population and technological superiority essential to the national security of the United States and NATO. Among these factors, the human resource element provides the greatest opportunity for expanding or constraining the benefits of technology. Available information indicates that dependence on a qualitative military advantage may well drive the Army of the US--and those of all countries in the NATO Alliance--beyond their ability to attract and retain highly qualified skilled personnel at some future period. Failure to recognize human resource constraints now will have an adverse impact on future benefits expected from today's investments in technology.

Linkages among providers of competency-based education are key to these complex issues. As our nation faces the human resource crises, by working collaboratively, creatively, and innovatively, we can provide the levels of education necessary to achieve the transition to a higher technological based Army and society.

THE MISMATCH GAME: SELECTION PRACTICES VERSUS ON-JOB COMPETENCY NEEDS

by

Mary Lou Schaalman
McBer and Company
Boston, MA

To what extent do employment selection practices relate to the actual competencies required in jobs? That was the question which was at the heart of a research project carried out for the National Institute of Education (NIE) (Harlan, Klemp & Schaalman, 1980). A study was conducted to determine the current state of the art in selection practices. The researchers ascertained the state of current practice by reviewing the methods used to select employees for 239 different jobs in more than 100 organizations. The Survey methods used limit the generalizability of results to some degree, however, the trends unveiled are probably a conservative reflection of true practice. In other words organizations which are small have low visibility or were unwilling to candidly describe their practices probably do less systematic, logical and legally defensible hiring.

Jobs were classified according to function (i.e.,production, maintenance, managerial, boundary, adaptive), skill level (e.e., professional, skilled, unskilled), and type of competencies required for performance (i.e.,intellectual, interpersonal or psychomotor competencies). Selection methods were also classified on the basis of which types of competencies they are used to assess. Actual use of the various methods was compared to the job requirements and the method's ability to assess them. The mismatch between methods and needs was great.

Organizations tend to use unvalidated selection procedures, most often the interview. Selection practices are used for the sake of tradition, more often than for their ability to accurately assess performance related competencies. For example, engineers are often selected on the basis of interviews and recommendations. Few organizations have validated either procedure to be sure it is predictive of future performance. The research literature suggests that neither is very good. Even the best interviews pick up only social skills and a little information on basic intelligence. Neither provides reliable specific information on the specific content knowledge required of an engineer, nor desire or ability to do careful, accurate analysis based on that knowledge.

Other examples of the mismatch between selection practices and job competencies abound. The implications for educators are serious. Should educators teach to job competencies or competencies required to pass selection hurdles or both?

(Copies of the research report that this presentation was based on can be obtained using the following ERIC System retrieval number:

Clearinghouse# (CH): CE027160)

THE BASE CURRICULUM PROJECT FOR HUMAN SERVICE WORKERS: AN APPLIED COMPETENCY MODEL

by

Dr. Paul F. Stimson
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Division of Graduate and Continuing Education
Worcester State College, Worcester, MA

This session focused on a presentation of an applied competency assessment analysis and the development of training curriculum modules for entry level human service providers in Massachusetts.

The Base Curriculum Project of the Massachusetts State College System was developed on a grant from the Department of Social Services and a Special Projects grant from the PCE funds of the Massachusetts State College System. To enhance the delivery of quality human services in the Commonwealth, the Project developed a competency-based core curriculum for human service professionals and a replicable model for development of curriculum with community input.

To meet this purpose, the Project was divided into four developmental phases.

Phase 1 encompassed start-up procedures such as staff procurement, development of project design, and the establishment of procedural policies.

Phase 2 encompassed the development of the initial content area to experiment with developmental designs and determine the most appropriate ones to meet the project goals. This phase also included the collection of agency data and a needs assessment.

Phase 3 encompassed the development of the first five content areas and the outline of the developmental model.

Phase 4 encompassed the completion of the remaining content areas and evaluation of the first four phases.

The first three phases constituted the initial major part of the Project with a February, 1981, completion date. The fourth phase constituted the second major part of the Project with a June, 1981, completion date.

The four operational components were Community Organization, Curriculum Development, Process Evaluation, and Information Retrieval. The community organizers, primarily people who have had agency experience, functioned to ascertain the needs of agencies as perceived by directors, supervisors, and direct-service workers. They interpreted these needs to the curriculum developers and provided continuing agency feedback to assure a built-in validity for the curriculum. They also developed the competency assessment tools to carry out these functions.

The curriculum developers were senior college faculty from eight Massachusetts State Colleges. They developed the competencies, the behavioral objectives, put the curriculum together, suggest teaching models for diverse learning situations, and provide recommendations for pre- and post-testing of the curricular units.

The process evaluators provided evaluation of the Project's dynamics and its products and gave continuous feedback to facilitate directional changes. They also developed the tools to perform these functions.

The Information Retrieval System provided easy access to all aspects of the Project, maintained a multiple filing system, documentation of events and processes, and continuity among and between the various project components.

As is implied in the description of the community organizers' duties, the curriculum was based on a needs assessment of the entry-level social service professional as perceived by the directors, the supervisors, and the direct service workers themselves from 43 diverse Worcester ABE agencies. The completed Project should facilitate future interactions between the field and training institutions making training relevant to the user. The Project developed and documented not only products, but an understanding of the process by which the products were developed. It incorporated in its design the flexibility that is associated with mastery learning, individualized instruction and criteria-based instruction. It encourages the varying of competency combinations depending upon the needs of the particular population to whom a specific course or workshop is being offered. It enables the curriculum to be offered as classes, parts of classes, or combinations of classes, in half-day, full-day, or multiple day workshops in a delivery system flexibility for which many agency personnel expressed a desire. And it allows people to take only those parts of the curriculum they have need for.

The curriculum provides a generic field and experience validated competency base on which to build a coordinated network of agency-specific courses and programs and/or a coordinated academic human service degree program. The project was housed in the Institute for Community Services, Office of Community Affairs, Division of Graduate and Continuing Education at Worcester State College, Dr. Stimson was the Assistant Director of the Project.

A TECHNIQUE TO ANALYZE AGENCIES EDUCATION FUNCTION:
A TEMPLATE FOR STAFF DEVELOPMENT AND LINKAGES

by
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William Barnes
Michael Frith

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Introduction: The relationship of this lifelong learning analyze technique to competency based education rests on: (a) reducing ambiguity concerning the educational functions of agencies, and (b) helping adult educators focus on the learning competences needed by learners in their daily lives.

The technique is also useful as a way to increase the linkage skills of staffs who want to work across agencies on common problems.

Procedures: Each participant created an educational profile of their agency, using a shortened version of the lifelong learning scale (see attached).

In groups of four, participants shared their perceptions of their agencies, using the profiles as the basis of discussion. The four profiles of each small group were compared. The participants used a prepared simulated case as a basis for discussing how they might go about forming a linkage in order to solve the problem presented in the case. The data generated in the four profiles was used to suggest factors that might support or hinder linkage efforts, as they addressed ways to work together as educators.

Report Out: Each of the small groups presented the results of their efforts to use the lifelong learning analysis technique to work in the case simulation.

In a general discussion, participants offered several creative suggestions of ways the lifelong learning scale might be used for interagency and intra-agency purposes. These ideas included having an agency's staff examine their practices, and using the data for staff development.

Evaluation: Each participant made a profile, using the lifelong learning scale, of this workshop.

HOW TO CONDUCT IN-HOUSE READING IMPROVEMENT COURSES FOR BUSINESS AND INDUSTRY

by

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Trainers in business and industry can learn how to teach their own in-house reading improvement courses by reviewing appropriate teaching materials and trainers manuals and by becoming acquainted with some basic techniques.

Trainers should make their employers aware of the need to improve reading skills, especially speed of comprehension. For example, some managers spend 50 to 75 percent of their work day reading work-related documents. When managers improve their speed of reading, the company gains because manager "output" increases.

Trainers should share the objectives of their program with participants. Two typical objectives are: 1) participants will improve their reading efficiency from 40 to 200 percent; and 2) participants will become more flexible readers.

Trainers can help participants attain objectives by teaching them how to skim and by completing "pacing" exercises with them. Two highly recommended course materials are Developing Reading Skills for Business and Industry, by Richard P. Santeusanio, CBI Publishing Company, Boston and Developmental Speed Reading Course by Alan Sack and Jack Yourman, College Skills Center, New York.

Before trainers begin their instructional program they should pre-test their students by using the tests included in the aforementioned instructional programs and/or by using a commercial test such as the McGraw-Hill Reading Test by Alton Raygor. After the program is completed alternate forms of the tests can be used to measure the progress of the participants.

THE NEW BEDFORD ADULT DIPLOMA PROGRAM: AN ALTERNATIVE CREDENTIALING PROGRAM

by

Elaine Feingold
Adult Diploma Program
New Bedford, MA

More than two thirds of the adults in New Bedford over 25 years of age have not completed the requirements for either a high school diploma or an equivalency certificate. In a cooperative effort to 1) improve the educational level of the population, 2) make the individual more employable, 3) raise the training potential of the workforce and ultimately to attract new employment opportunities for the region, the New Bedford School Department, Division of Adult Education, and the New Bedford CETA Consortium are offering an innovative, alternative high school program for adults.

Since the program's inception in 1977, more than two hundred and fifty members of the workforce of New Bedford and surrounding communities have taken this opportunity to improve their skills and to acquire the certification necessary to qualify for better paying jobs and entry to post-secondary education.

Based on the premise that one continues to acquire knowledge after leaving school, high school credits are awarded to adults who can demonstrate skills and competencies gained from experience in areas such as: Employment, Training Programs, Family Health and Education, Home Management, Community Volunteer Experience, Fine Arts, Second Language, Practical Arts, Sports, Recreation, Travel, and Military Service.

In addition to earning high school credits for life experience, each person is required to demonstrate high school level competencies in communications and computations skills and must successfully complete a U.S. History course.

The minimum time for a student to earn the required 16 high school credits is 12 weeks, the average being six months. Each student works individually with a diploma consultant who evaluates, counsels and refers students to courses when necessary. Graduates of the program have reported that flexible hours and individualized programs have enabled them to earn their high school diplomas in a realistic time frame consistent with other primary demands on their time.

Follow-up responses from one hundred graduates indicate that a significant number have realized gains in self-esteem, in their careers and private lives which they attribute directly to the successful completion of the program.. Fifty-four percent of those graduates have continued on to further education, and 61% reported that they were employed in the private sector at the time of the survey as compared to 14% employed at the time of their enrollment in the program.

THE LOWELL ADULT DIPLOMA PROGRAM

by

Frederick A. Abisi
Elizabeth K. Tsapatsaris
Lowell Adult Diploma Program
Lowell, MA

The Lowell Adult Diploma Program is an assessment system by which adults (18 years or older) can receive their high school credentials.

All documented experiences in prior academic training or in practical life skills can be considered in terms of credit toward a high school diploma. In addition to a minimum of 80 credits accrued from such learning experiences, a candidate in the Lowell Adult Diploma Program must also demonstrate competency in reading, writing, and math skills.

The 15-minute slide/tape presentation portrays the process of the program through the explanation of a narrator and the experiences of two graduates. These graduates represent a cross-section of adults, involved in the Lowell Adult Dioloma Program, who describe their backgrounds, feelings, needs, and aspirations. Each one is really a composite of many graduates and interprets a personalized account of typical candidates in adult diploma programs.

This presentation not only emphasizes that education is a life-long process, but, also, that given a clear set of objectives and criteria, a person can prepare to demonstrate competency in an area without fear of the unknown. It stirs up our responsibilities as educators and offers a good argument in favor of adult diploma programs.

Written and directed by Elizabeth K. Tsapatsaris, program developer and coordinator of the Lowell Adult Diploma Program, the presentation was produced by the staff of the Lowell Adult Education Center as an information medium for potential candidates, educators, and the general public.

For further information one may contact Mr. Frederick A. Abisi, Director, Adult Education Center, Paige Street, Lowell, Massachusetts 01852.

CBE AND LIMITED ENGLISH PROFICIENCY ADULTS

by

Howard H. Kleinmann
Queens College
New York, NY

The influx of various groups of refugees in recent years has given rise to a number of problems related to refugee resettlement and integration into American society. One of the most critical of these has been the inability of many refugees to document secondary education in their native lands, which has prevented them from entering certain training programs, taking various state licensure examinations, and obtaining employment which requires proof of having earned a high school diploma.

In an attempt to solve this problem, Allegheny Intermediate Unit (AIU), the regional local educational service agency for 46 school districts in Allegheny County, Pennsylvania, planned an external high school diploma program addressing the secondary education documentation problem of Indochinese refugees. The program incorporated conventional ESL teaching methods with life skills education content, teaching refugees those skills needed to function as an adult. The program was set up such that testing would yield concrete documentation of educational competency.

The program was coordinated with the local refugee resettlement agency and nine local school districts. An advisory council set uniform diploma requirements, and reviewed instructional design, testing, and other programmatic matters.

An individual education plan (IEP) was developed for each student. The IEP focused on those specific skills and information that the students needed to internalize in order to attain functional competence. Included in the IEP were titles of individual instructional materials and exercises designed to help students acquire those competencies which they presently lacked. Four study options were available to students: (1) group classes at two sites; (2) individual learning/counseling sessions at the refugee resettlement office; (3) independent study; and (4) tutorial instruction.

The project allowed 31 foreign adults to earn a high school diploma. The important derivative benefit of this result was that it qualified the graduates to take various licensure examinations and acquire employment or training in chosen vocational areas, thus facilitating their resettlement.

WHAT IS COMPETENCY BASED ADULT EDUCATION?

by

Norman M. Singer
University of Ohio
Columbus, OH

This session was planned as an opportunity for conference participants to interact and focus their attention on relevant issues and concerns in the CBAE movement. The objective was to alert conferees to a wide range of positive and negative opinions through the active exchange of ideas about CBAE process. Group Grope, the interactive "framegame" used during this session, elicited the ideas of participants themselves and also incorporated the ideas of the presenter as well as viewpoints from selected CBA literature.

In planning this session, the interactive technique itself was intended as an opportunity for conference participants to experience first-hand an approach to group work which might well be applied in home settings. The problem of facilitating free expression of ideas while still accomplishing worthwhile goals is often a challenge. The Group Grope technique is offered as a tool to apply judiciously when one is working with a group in which all the members will benefit from an exchange and exploration of personal opinions about a topic of common importance.

The topic of consideration during this session was, "A VITAL LESSON TO BE LEARNED ABOUT THE CBAE PROCESS IS..." Participants were asked to probe their own thinking about how they would complete the statement. Then they were asked to write several endings for the statement above --one ending on each of several blank index cards which were provided. Subsequently, through a series of interactive steps, the participants formed coalition groups around their common or complementary viewpoints.

In a follow-through mailing to participants in this session, the collective results of the frame game were provided along with the names and addresses of the other participants, instructions for conducting a frame game, and photocopies of the transparencies used to conduct the session at this year's CBAE conference.

USING THE READING INVENTORY AND THE JOURNAL PROCESS IN A COMPETENCY - BASED SYSTEM LANGUAGE PROGRAM

by

Sharyn Lowenstein
University of Massachusetts
Boston, MA

Older adults returning to school have developed their language skills rather inconsistently, so that while some aspects are particularly strong, others require reinforcement. Often the areas of strength and weakness are quite unpredictable, and the students themselves have difficulty assessing their language skills. The adult students' attitudes and reactions to many reading and writing tasks are extreme: Frequently, they are so overconfident that they submit written work which fails to meet many or most of the criteria of the competencies because of grammatical, logical or rhetorical deficiencies, or so underconfident that they refuse to submit work which is actually highly successful, and which would satisfy the criteria. Further, students may suffer from blocks or anxieties which significantly interfere with their personal satisfaction and involvement with a piece of written work their own or another's.

At the College of Public and Community Service (CPCS), a competency-based program for urban adults at the University of Massachusetts, I have found that many students benefit best by individual work on both their reading and writing

Reading Informal Inventory -- This is an individualized testing technique in which the student reads and discusses passages prepared and selected by the tester. The tester with some practice, can learn to diagnose a student's pronunciation, reading comprehension, and study skills in surprising detail. Because the student is responding to the material orally in an informal setting, the test is much less threatening than a paper and pencil test. Further, the tester can adjust the type, order, number and content of the questions asked, and the passages can be constructed from relevant and appealing material for the student. Thus, the test results are accurate and truly measure the skills desired.

Journal Process -- Many students want to improve their writing, but find courses inconvenient or intimidating. The journal, if used regularly, can increase fluency, aid creativity, and teach the journal keeper much about the writing process itself, in a non-threatening way. By re-reading the journal entries, the journal keeper often finds ideas for papers, projects, and competencies. Kept in times of crisis, as returning to school can be for the adult, the journal is also an ally, a friend, and helps the student evaluate her priorities and shape her new identity. The journal can be used across the curriculum to help students learn how they learn: it serves as a repository of strategies which students can later modify and shows students attitudinal and behaviorial patterns otherwise difficult to explore. When faculty participate in students' journal process, they can comment on how the students are tackling a problem or thinking about an issue, suggest alternative approaches where appropriate, lend support, and answer specific questions.

WOMEN OUT-OF-WORK:

BUILDING SELF-ESTEEM THROUGH COMPETENCY BASED CURRICULUM

by

Sondra G. Stein
WEAVE
Roxbury, MA

For the past year and one half, the staff at WEAVE has been working with women from the Roxbury/Dorchester area who have histories of chronic unemployment. The program serves women of all racial and ethnic backgrounds; the majority of participants, however, are Black women. Three-fourths of the women who come to WEAVE are AFDC recipients; the average age is 30.5 years. While 20% enter the program with high school diplomas or G.D.D.'s, almost all have below eighth grade reading, writing and math skills.

WEAVE was designed to serve as a transitional job-readiness program for women who are ready to build the skills and confidence they need to find work that will enable them to support themselves and their families. The first step in this process is to overcome the history of failure and expectation of continuing failure that participants bring from past educational experiences. Specifically, our task--like that of most adult educators--is to raise our students' self-esteem to enable them to believe in themselves and their capacity to act to change their own lives. At WEAVE we have found that the best means to this goal is through teaching basic reading, writing, and math skills in a group context.

While WEAVE began with a competency-based life skills curriculum, we soon found that the women in the program associated the skills they already possessed with their low social and economic status. As a result, concentrating on these skills did not build a sense of competence. Fluency in basic skills, on the other hand, is not only associated with success in the world, it also connects you and helps you communicate with that outside world. For these reasons, failure here is tied into feelings of powerlessness and isolation. Conversely, success in this area is empowering--especially when basic skills are taught using competency-based methods in a group context.

Competency-based methods are empowering because they make clear to the learner what she needs to learn, why it's valuable, and what she must do to demonstrate she has learned it. These methods break learning into manageable chunks, giving the learner a string of small successes that erode feelings of incapacity.

The group context is important because it provides social validation of learning. In a group, the learner can compare her own learning progress with the progress others are making. This provides a context for assessing her own skills which learners in individualized competency programs must do without. According to educators from several individualized programs, neither the score on a standardized test nor demonstrated competence in an applied situation give the learner that sense of where she stands in relation to the rest of her community. Other competency-based adult educators report faster and more consistent progress of learners in groups, confirming that social validation of learning empowers learners.

Our goal as adult educators is to increase the ability and opportunity of our students to act effectively so they can live fuller, richer lives. The development of competency-based adult performance levels made learning, especially in basic

skills, more accessible to adults by making it more relevant and more congruent with adult learning styles. By focusing competency-based education on basic skills in a group context, this methodology has been refined to take into account not only what and why adults learn, but also what obstacles keep them from learning and how they learn best.

DEVELOPING LOW-COST EFFECTIVE MASTERY LEARNING MATERIALS FOR BASIC EDUCATION

by

Steven Porter
Educational Programs Division
Laubach Literacy, Syracuse, NY

Mastery learning is an effective strategy for teaching basic skills and life skills to teenagers and adults who read below grade level. Mastery learning students study a lesson largely on their own and at their own pace. When ready, they take a criterion-referenced test. Students who score at or above the predetermined "mastery" level on the test move on to the next lesson. Non-masters who score below that level relearn all or some of the competencies in the unmastered lesson and then take another mastery test on that lesson. In mastery learning, non-masters get one or more chances to relearn and master each lesson.

Over the past 16 months, the Laubach Literacy Mastery Learning Team has developed a mastery learning kit in money management for older teens and adults who read at a 3rd to 7th grade level under a grant from the U.S. Office of Consumer Education, Department of Education. Although we had developed many other kinds of materials before, we had little concrete experience developing mastery learning materials. We had to learn the practical details as we went. We want to share the lessons we've learned in the project with others who might want to develop mastery learning materials that are specially tailored to their curriculum and to the special needs of their own students. We will discuss how to develop mastery learning tests and materials and also such issues as:

1. Extensive advance planning is crucial. Is mastery learning right for the intended students and their teachers? Plan and cost-out the development effort: can you do it and can you afford it?

2. Should your envisioned "mastery learning system include:
   a. Merely your existing texts supplemented by new mastery tests you will develop?
   b. Your existing texts plus mastery tests and new materials for reteaching non-masters the lessons they don't master in your existing texts? Or,
   c. Not only new mastery tests and new reteaching materials, but also new basic texts to replace your existing (but defective) basic texts?

   It's more expensive in time and money, but you may want to build a whole integrated system of correlated basic texts, reteaching materials, and mastery tests.

3. Mastery learning philosophy asserts that students differ not so much in how "smart" they are nor in how much they can learn, but in how fast they can learn. Given enough time, nearly all non-special students can master basic subjects. So, besides developing the mastery learning materials, developers must also:
   a. Help prospective mastery learning teachers organize their classrooms around self-paced and individualized (or small-group) learning in which teachers play roles of manager and tutor.
   b. Work out a grading system that does not undermine the mastery learning goal that all students will become equal "masters".
   c. Educate teachers, administrators and others about mastery learning and gain their acceptance and support.

67

4. Developers should pilot-test newly developed prototypes (mock-ups) of the mastery tests and learning materials they've developed in typical classrooms. Developers will gain invaluable insights through direct observation about how to make their products easier to use and to learn from.

5. At first, developing a mastery learning system may be expensive. A development team takes about a year to "shake-down" and become efficient. Development costs sharply diminish after the first year. Organizers should therefore consider whether their development project should be a one-shot, one-time-only event or should instead be a multi-year operation that will efficiently create several mastery learning systems at a lower per-system cost.

FRIEDA FACES LIFE:

A PILOT VIDEO TAPE TO TEACH ESL COMPETENCIES

by

Norman Shapiro
City College
New York, NY

GENERAL DESCRIPTION:

"Frieda Faces Life" is a proposed videotape series designed to provide limited English speaking adults with an opportunity to interact with the English of everyday life. The series will invite the learner to participate in the daily activities of Frieda, the central character, as she goes to her job, does her banking, eats in a restaurant, etc. Each self-contained episode, centering around one of these topics, provides the learner with a total communicative situation modeling the language and the content appropriate to each setting. The program is unique; the use of video combines an appealing character with the stimulus of real life situations to provide a motivating adjunct to ESL instruction.

A series of comprehension questions appears at intervals throughout the episode. These questions involve the students in active participation that serves to enhance understanding and allows for review.

A packet of print materials accompanies each episode. It includes a pre-viewing exercise, designed to introduce the vocabulary and general topic of the episode, a series of exercises written to provide follow-up communicative practice at various levels of language competency, and a copy of the script with suggestions for use.

PILOT EPISODE:

One episode was taped and accompanying print materials prepared for use in a sample of ESL classrooms. The 18 minute color recording describes Frieda's activities as she and a friend visit a restaurant: being seated, ordering, making a complaint, paying the bill, and tipping. A summary that restates the events provides for review of the content and language in the episode.

Eighty one adult learners in five ESL classes were presented the pilot videotape episode and accompanying print materials. The classes ranged from beginning to advance levels with teachers utilizing different exercises appropriate to the class level. Based on data obtained from questionnaires to teachers, the amount of instructional time spent on the unit ranged from 2 hours and 15 minutes to 12 hours. All five teachers expressed positive views about the program. Most felt the level of student interest and comprehension to be high. Similar ratings were obtained for the overall quality and value of the exercises. All said they would continue to use episodes of "Frieda Faces Life"as they became available.

Students were also requested to complete a simple evaluation form. Their responses were overwhelmingly positive. Almost all who responded (99%) agreed that the television program helped them learn English. Nearly as many (97%) agreed that it was interesting, and 89% said that it was fun to watch. Responses to the print materials were equally positive. When asked whether they would like to see more TV stories about Frieda, 99% said "yes".

When asked in what other situations they would like to see Frieda, some thirty different situations were named. Among those most frequently mentioned were Frieda at home with her family, taking a job interview, going to a hospital, and shopping. When asked how to improve the program, students most often thought the sound should be better and the film made longer. This reflects the technical inadequacies of the pilot tape.

The preliminary findings suggest that "Frieda Faces Life" has the potential for significantly enhancing the learning opportunities offered to limited English speakers. Not only are the tape and print materials appropriate to adult learners, but they could also be beneficial and relevant to teenagers. Furthermore it appears that the program offers something to learners at all levels of language proficiency. While learners at the beginning level may understand only the general idea and learn a few new vocabulary items, learners at a more advanced level can use the tape and exercises at a higher level.

FOOTNOTE:

The videotape pilot is a cooperative production of the New York City Board of Education's Adult Basic Education/High School Equivalency Services Program and City College of New York's School of Education and School of General Studies. Filming, editing and technical assistance were provided by the School of Education Television Facilities. The tape and print materials were conceived, written, and produced by Leslee Oppenheim and Norman Shapiro.

THE PRACTICE PROFILE:

AN EDUCATIONAL PLUMBER'S HELPER

by

David P. Crandall
Susan F. Loucks
The Network, Inc.
Andover, MA

The Practice Profile is a tool that allows program developers, managers and evaluators to clearly describe their practice -- what is actually occurring when the practice is in use, and what is required for implementation to take place. The profile can be (and has been) used to:

- Communicate with a wide variety of audiences by providing a clear picture of the practice,
- Assess the extent of implementation of a practice by allowing description of how each participant is using it,
- Guide staff development efforts and resource allocation by identifying which components of a practice are not being used or are being used in a minimal way.

Practice Profiles have three parts:

- The component checklist, which identifies between 6 and 12 key components and describes how these components might vary in use,
- Implementation requirements, which list training, personnel, materials and equipment needed to use the practice, and
- Practice characteristics, such as purpose, complexity and complexity and prescriptiveness, which describe the practice and allow direct comparison with others.

A paper with the same title as the presentation is available from the presenters for the cost of printing. It includes examples of Practice Profiles as well as a seven-step procedure for their development.

COMPETENCIES FOR ABE AND ASE PROGRAMS: A SUMMARY OF STUDIES AND RESULTS

by

Dr. Joan Keller Fischer, Director
Community Affairs, Worcester State College
Massachusetts

The findings of a study sponsored by the National Institute of Education were presented. The purpose of the study was to summarize and compare the results of twelve efforts undertaken to identify the necessary competencies for functioning adequately in today's society. In completing this comparison the ramifications of decisions made in designing and carrying out competency identification studies were highlighted. Since these decisions profoundly affect the findings, summaries of the purposes and procedures were included in the report. With this perspective in mind the findings of eleven studies completed prior to 1980 were compared to the original 65 APL designated catagories and competencies. APL was selected as the reference point because many of the later studies followed up on the APL findings. However, five of the studies, two of which predated APL, were broader than APL.

To prepare the cross-referenced list of competencies, each APL major objective and all of their enabling objectives were listed. Examination of the twelve studies revealed considerable variation in emphasis, phrasing and inclusiveness. Thus, it was decided to seek similarities in the topics or major intent of objectives rather than in the specific working. Even with this adjustment, substantial reviewer judgment was required to complete the cross reference.

The summary of competencies encompassed four parts: 1) Knowledge/Information Categories 2) Basic Skills 3) Major Objectives by Knowledge/Information Area and 4) Objectives not included in APL. While there was general agreement on the 5 original APL Knowledge areas, cultural and self-awareness was an added category not emphasized in APL. Of all the knowledge areas consumer economics and occupational knowledge received the most attention. With respect to basic skills the findings underscored the importance of reading, writing and math skills as well as of preparation for passing the GED test.

The resultant summary of competencies was not intended to be a definitive listing. Adult educators were cautioned that the decisions made by the researchers relative to what knowledge areas to study, which objectives to include, how to phrase statements, etc., established limitations of each study. Overall, though, there appeared to be a fair amount of consistency across the projects.

APPENDIX A

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This conference is sponsored jointly by the Massachusetts Department of Education, Bureau of Student, Community and Adult Services, Boston, and the Office of Community Affairs, Division of Graduate and Continuing Education, Worcester State College, Worcester, Massachusetts.

The Bureau of Student, Community and Adult Services has responsibility for implementing the State Board of Education's policies regarding adult and community education and students' rights.

The Division of Graduate and Continuing Education at Worcester State College includes in its function providing non-credit learning experiences through the Office of Community Affairs. In addition, the Division offers a graduate program in adult education which is supported by a grant from the Bureau of Student, Community and Adult Services, Massachusetts Department of Education.

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The Massachusetts Association for Public and Continuing Adult Education (MAPCAE), the Adult Education Association in Massachusetts (AEA), and the Massachusetts Community Education Association (MCEA) are professional organizations dedicated to the improvement of adult and continuing education practice. They are open to practitioners, administrators, and to all friends of adult education in this State. For details about MAPCAE, call Linda Faria Braun (President Elect, 1981-82) at 617-580-7475. Arnita Harrison is President of AEA (1981-82). For details, call Sharon Walker at Fischer Junior College, 617-262-3240. The President of MCEA for 1981-82 is Cynthia Talbert. For details, call 617-793-8100.

APPENDIX B

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APPENDIX C

69.13

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Bruner, Cornelia, College for Human Services, 345 Hudson Street, New York, New York 96710 (**Session 8**)
Bryant, Brenda, Andrews Bryant Incorporated, 1239 D Street, N.E., Washington, D.C. 20002 (**Session 35**)
Buchanan, Barbara, University of Massachusetts, 100 Arlington Street, Boston, Massachusetts 02116 (**Session 52**)
Burtoff, Michele, Center for Applied Linguistics, 3520 Prospect Street, N.W., Washington, D.C. 20007 (**Session 58**)
Campia, Grace, Occupational Resource Center, 75 New Dudley Street, Boston, Massachusetts 02119 (**Session 53**)
Caradonio, James, Occupational Resource Center, 75 New Dudley Street, Boston, Massachusetts 02119 (**Sessions 39, 54, 68**)
Carr, Neil, Bureau of Program Services, State Department of Education, Albany, New York 12234 (**Sessions 24, 39**)
Chorianopoulos, Cynthia, Massachusetts Department of Education, 54 Rindge Avenue Extension, Cambridge, Massachusetts 02140 (**Sessions 39, 68**)
Conrick, Sharon, BOCES, Dix Avenue, Hudson Falls, New York 12839 (**Session 3**)
Cooney, Joseph, VESP, 615 Bradford Street, Redwood City, California 94063 (**Session 30**)
Crandall, David, The Network, Incorporated, 290 South Main Street, Andover, Massachusetts 01810 (**Session 66**)
Cross, Patricia, Harvard Graduate School of Education, Appian Way, Cambridge, Massachusetts 02138 (**General Session I**)
Crosson, Richard E., Massachusetts Department of Education, 88 Massasoit Avenue, West Springfield, Massachusetts 01089 (**Sessions 39, 68**)
Deegan, James, Metropolitan State University, 701 8th Avenue, N.W., St. Paul, Minnesota 55104 (**Session 21**)
Dolan, Lawrence, University of Rochester, Rochester, New York 14618 (**Session 48**)
Eberhard, Raymond, California Department of Education, 721 Capital Mall, Sacramento, California 95814 (**Session 37**)
Elfenbein, Iris, American Council of Life Insurance, 1850 K Street, N.W., Washington, D.C. 20006 (**Session 35**)
Eppley, Karen, APPLY, Upper Wabash Vocational School, Box 606, Wabash, Indiana 46992 (**Session 43**)
Ewer, Gale B., Massachusetts Department of Education, 31 St. James Avenue, Boston, Massachusetts 02116 (**General Session II; 39, 68**)
Feingold, Elaine, New Bedford Public Schools, 455 County Street, New Bedford, Massachusetts 02740 (**Session 46**)
Fischer, Joan K., Worcester State College, 486 Chandler Street, Worcester, Massachusetts 01602 (**Sessions 61, 68**)
Foster, Morris, Big Country Adult Education Cooperative, 104 Pine Street, Abilene, Texas 79601 (**Session 13**)
Freedman, Susan, Massachusetts Department of Education, 31 St. James Avenue, Boston, Massachusetts 02116 (**Sessions 39, 68**)
Frith, Michael, University of Massachusetts, Community Education Resource Center, Amherst, Massachusetts 01003 (**Session 42**)
Gabriella, Deatra, Burlington County College at Pemberton, Browns Mills Road, Pemberton, New Jersey 08068 (**Session 41**)
Goudey, William N., Massachusetts Department of Education, 31 St. James Avenue, Boston, Massachusetts 02116 (**Sessions 39, 68**)
Grandee, James, International Union of Operating Engineers, 120 Mt. Hope Street, Roslindale, Massachusetts 02131 (**Session 49**)
Griffeth, Dudding, Pennsylvania Power and Light, N 4, 2 North Ninth St., Allentown, PA 18101 (**Session 34**)
Houston, Laura, College for Human Services, 345 Hudson Street, New York, New York 10803 (**Session 8**)
Howey, Jane, Occupational Development Center, 7th and Pontiac, Rochester, Indiana 46975 (**Session 43**)
Huberman, Allen, SAETA/ADP, 84 Highland Avenue, Salem, Massachusetts 01970 (**Session 47**)
Huff, Shiela, McBer and Company, 137 Newbury Street, Boston, Massachusetts 02116 (**Session 36**)
Jones, Lynda, BOCES, Dix Avenue, Hudson Falls, New York 12839 (**Session 3**)
Joyce, Edward, Boston Adult Diploma Program, 26 Court Street, Boston, Massachusetts 02128 (**Session 47**)
Kleinmann, Howard, Queens College, Flushing, New York 11367 (**Session 50**)
Klem, Lynn, New Jersey Adult Reading, Glasboro State College, Glasboro, New Jersey 08028 (**Session 6**)
Kobe, John, Hennepin Technical Center, 1820 North Xenium Lane, Minneapolis, Minnesota 55441 (**Session 10**)
Lampert, Kenneth, Human Service Center, Metropolitan State University, 121 Metropolitan Square, St. Paul, Minnesota 55101 (**Session 28**)
Lewis, Linda, University of Connecticut, School of Education, Storrs, Connecticut 06268 (**Session 12**)
Longnion, Bonnie, Adult Reading, Education Department, SWTSU, San Marcos, Texas 78666 (**Session 5**)
Loucks, Susan, The Network, 290 South Main Street, Andover, Massachusetts 01810 (**Session 66**)
Lowenstein, Sharyn, CALM Center, 100 Arlington Street, Boston, Massachusetts 02116 (**Sessions 26, 55**)
Mandell, Naomi, Worcester Adult Diploma Program, 014 Worcester Center, Worcester, Massachusetts 01583 (**Session 46**)
McDonnell, Tessa, School for Life Long Learning, Dunlap Center, Durham, New Hampshire 03824 (**Session 23**)
Murray, Arthur E., Massachusetts Department of Education, 54 Rindge Avenue Extension, Cambridge, Massachusetts 02140 (**Sessions 39, 68**)
Nickse, Ruth S., Massachusetts Department of Education, 31 St. James Avenue, Boston, Massachusetts 02116 (**General Sessions I, II, III; 33, 39, 46, 68**)
Oen, Urban, Project CBVE, 301 North Swift Road, Addison, Illinois 60101 (**Session 1**)
Paduch, Helen, Worcester Adult Diploma Program, 014 Worcester Center, Massachusetts 01583 (**Session 46**) (cont.)

Participant Index (cont.)

Parker, James, 26B Ridge Road, Green Belt, Maryland 20770 **(Sessions 19, 39, 68)**
Patience, Wayne, General Educational Development Testing Service, One Dupont Circle, Washington, D.C. 20036 **(Session 29)**
Ploetz, Greta, Literacy 85, 1080 University Avenue, St. Paul, Minnesota 55104 **(Session 21)**
Popkin, Walter, Bell Gardens Community Adult School, 6119 Agra Street, Bell Gardens, California 90201 **(Session 4)**
Porter, Kathleen, Syracuse Research Corporation, Merrill Lane, Syracuse, New York 03210 **(Session 2)**
Porter, Steven, 320 Jamesville Avenue, Syracuse, New York 13210 **(Session 60)**
Prince, Bonnie, Alternative Education, Hocking Technical College, Nelsonville, Ohio 45764 **(Session 32)**
Rawlings, Lyngrid, 1745 North Portal Drive, N.W. Washington, D.C. 20012 **(Session 11)**
Reed, Horace, School of Education, University of Massachusetts, Community Education Resource Center, Amherst, Massachusetts 01003 **(Session 42)**
Rickard, Patricia, CASAS, San Diego Community College, San Diego, California **(Sessions 17, 18)**
Risley, Cynthia, Adult Learning Center, 697 North Street, Pittsfield, Massachusetts 01201 **(Session 47)**
Rogers, Arnold, Adult Learning Center, 160 Shaw Avenue, Cranston, Rhode Island 02905 **(Session 59)**
Ruston, Lorraine, Clovis Adult School, 914 Fourth Street, Clovis, California 93612 **(Session 25)**
Rydell, Susan, Human Services Center, Metropolitan State University, 121 Metropolitan Square, St. Paul, Minnesota 55101 **(Session 28)**
Sack, Michael, Jobs-for-Youth, Incorporated, 119 Charles Street, Boston, Massachusetts 02114 **(Session 38)**
Santeusanio, Richard, Danvers Public Schools, 60 Cabot Road, Danvers, Massachusetts 01923 **(Session 44)**
Schaalman, Marylou, McBer and Company, 137 Newbury Street, Boston, Massachusetts 02116 **(Session 36)**
Selz, Nina, Xerox Training Center, P.O. Box 2000, Leesburg, Virgina 22075 **(Sessions 7,39, 68)**
Shaheen, Malbine, Lawrence Adult Diploma Program, 514 Essex Street, Lawrence, Massachusetts 01840 **(Session 46)**
Shapiro, Norman, Continuing Education, A224 City College of New York, 138th and Convent Avenue, New York, New York 10031 **(Session 64)**
Shelton, Elaine, APL Diffusion, Education Annex S-21, University of Texas, Austin, Texas 78712 **(Sessions 34, 39, 68)**
Sherman, Debra, College of Public and Community Service, University of Massachusetts, 41 Colonial Road, Needham, Massachusetts 02192 **(Session 65)**
Singer, Norman, National Center for Vocational Research, 1960 Kenny Road, Columbus, Ohio 43210 **(Session 51)**
Smith, Kathleen, 41 Harold Street, Sharon, Massachusetts 02067 **(Session 15)**
Steele, Emilie, CALM Center, University of Massachusetts, 100 Arlington Street, Boston, Massachusetts 02116 **(Sessions 26, 39, 68)**
Stein, Sandra, WEAVE, 10 Linwood Street, Roxbury, Massachusetts 02119 **(Session 57)**
Stewart, Carol, Fayetteville Technical Institute, Fayetteville, North Carolina 28303 **(Session 48)**
Stickney, William, Adult Learning Center, 697 North Street, Pittsfield, Massachusetts 01201 **(Session 47)**
Stiles, Richard, California Department of Education, 721 Capitol Mall, Sacramento, California 95814 **(Sessions 17, 18)**
Stimson, Paul, Worcester State College, 486 Chandler Street, Worcester, Massachusetts 01602 **(Sessions 40, 68)**
Strier, Eileen, Project SCALE, 99 Dover Street, Somerville, Massachusetts 02144 **(Session 46)**
Stump, Robert, 2208 North Quintana Street, Arlington, Virginia 22205 **(Session 31)**
Taylor, Paul, City College of New York, 138th and Convent Avenue, New York, New York 10031 **(Session 27)**
Tibbetts, John, San Francisco State University, 1600 Holloway Avenue, San Francisco, California 94132 **(Session 35)**
Tsapatsaris, Elizabeth, Lowell High School Annex, Paige Street, Lowell, Massachusetts 01852 **(Session 47)**
Walsh, James, Lawrence Adult Diploma Program, 514 Essex Street, Lawrence, Massachusetts 01840 **(Session 46)**
Weins, Ben, Pennsylvania State University, Adult Education, 259 Radnor, Chester Road, Radnor, Pennsylvania 19087 **(Session 56)**
Whitney, Douglas, American Council on Education, One Dupont Circle, Washington, D.C. 20036 **(Session 29)**
Zinner, Jane, 1840 Benton Street, Santa Clara, California 95050 **(Session 17, 18)**

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